

Traffic Collision
Statistics Report

2008



**Manitoba
Public Insurance**

Preface

Motor vehicle collisions resulting in a fatality, injury or property damage in excess of \$1,000 are required by law to be reported to a law enforcement agency. Subsequently, the law enforcement agency completes a Traffic Accident Report (TAR) for the collision. The *Traffic Collision Statistics Report* deals with these reportable collisions and the TARs arising from them.

The *Traffic Collision Statistics Report* is the official report of traffic collision statistics in Manitoba. It reports the details surrounding traffic collisions in Manitoba, allowing users to analyze the reasons why collisions occur. Knowing more about collisions helps policy makers, traffic safety experts, public safety programmers and legislators to pinpoint areas for review and create targeted approaches to preventing and reducing traffic collisions.

Annual collision statistics, such as those contained in the *Traffic Collision Statistics Report*, are used to:

- Indicate trends;
- Identify driver and vehicle factors in accidents;
- Evaluate current programs and new provincial road safety initiatives;
- Monitor commercial vehicle collisions in accordance with the National Safety Code; and,
- Guide development of new policies and programs to reduce the frequency and severity of traffic collisions in the province.

The importance of this Report and the data contained therein is acknowledged in Canada's Road Safety Vision 2010 (RSV 2010), a national initiative aimed at making Canada's roads the safest in the world. The strategic objectives of RSV 2010 aim to raise public awareness of road safety issues; improve communication, co-operation and collaboration among road safety agencies; toughen enforcement measures; and, improve national road safety data collection and quality.

A brief Synopsis of each section of this Report can be found below.

Section 1 – Drivers, Vehicle and Collision Rates: Historical Trends

This section calculates involvement rates for total collisions as well as for fatal, injury and property damage only (PDO) collisions using licensed drivers and vehicles registered for the years 1999 to 2008 inclusive. This section also deals with relative involvement rates of drivers by specific age groups.

Section 2 – Licensed Drivers

This section deals with Active and Suspended Drivers by specific Age Groups, Gender and Manitoba Licence Class.

Section 3 – Vehicle Registrations

This section deals with vehicle registrations and examines these by three major categories: Commercial; Non-commercial; and, Snowmobiles (Recreational).

Section 4 – Traffic Collisions

This section counts the number of collisions in Manitoba and provides detail for collisions of different severity, fatal, injury and property damage only (PDO). Historical information regarding the number of collisions, the number of victims, the number of vehicles and the number of drivers over the ten year period 1999 to 2008 is presented. Details are provided for 2008 traffic collisions in terms of the month of occurrence, day of the week, time of day, weather and road conditions, location and type of collision.

Section 5 – Collision Victims

This section calculates the number of victims killed and injured in traffic collisions and examines the severity of the injury received by the victim. Month, time and day of occurrences are examined, as well as the age of the victim. Specific contributing factors to the collision are also presented for each victim. Relative involvement of victims in traffic collisions per 100,000 people in the general population is also calculated.

Section 6 – Pedestrian Victims

This section calculates the number of pedestrian victims killed and injured in traffic collisions and examines the severity of the injury received by the pedestrian victim. Month, time and day of occurrences are examined and breaks are provided for the age of the pedestrian. The specific pedestrian actions taken immediately prior to the collision are also presented. Relative involvement of pedestrians in traffic collisions per 100,000 people in the general population is also calculated.

Section 7 – Vehicle Involvement

This section calculates the number of vehicles involved in traffic collisions. Vehicle involvement in a collision is counted for each vehicle type (such as automobiles, vans, pick-up trucks, types of emergency vehicles). Vehicles involved in collisions that were, or were not, transporting hazardous loads and the nature of these loads is also indicated.

Section 8 – Driver Involvement

This section calculates the number of drivers involved in traffic collisions and breaks this down by age and gender of the driver. Relative involvement in traffic collisions is also detailed.

Section 9 – Contributing Factors

This section examines the contributing factors to traffic collisions as reported by police on the Traffic Accident Report (TAR). Detail is provided for collision severity and for the age of the driver involved in the collision. Driver involvement rates (per 10,000 licensed drivers) in collisions with specific contributing factors are detailed.

Section 10 – National Safety Code Monitoring Report

This section calculates the number of National Safety Code (NSC) commercial vehicles involved in traffic collisions, the severity of those collisions and the victims injured and killed in them.

Section 11 – Off-Road Vehicle Collisions

This section counts the number of off-road vehicle (ORV) collisions in Manitoba and provides detail for collisions of different severity, fatal, injury and property damage only (PDO). Historical information regarding the number of ORV collisions, the number of victims, the number of vehicles and the number of drivers involved over the ten year period 1999 to 2008 is presented. Details are provided for 2008 ORV collisions in terms of the month of occurrence, day of the week, time of day, weather and road conditions, location and type of collision.

Section 12 – Alcohol-Related Criminal Code Convictions

This section counts the number of drivers convicted of alcohol-related Criminal Code offences for the year 2007 by age at the time of the offence and includes historical statistics for the period 1989 to 2006. Details are provided for 'first', 'second' and 'third and subsequent' (i.e., third, fourth, fifth, etc. combined) offences, whether or not the offence involved a collision and whether or not a youth was present in the vehicle at the time of the offence.

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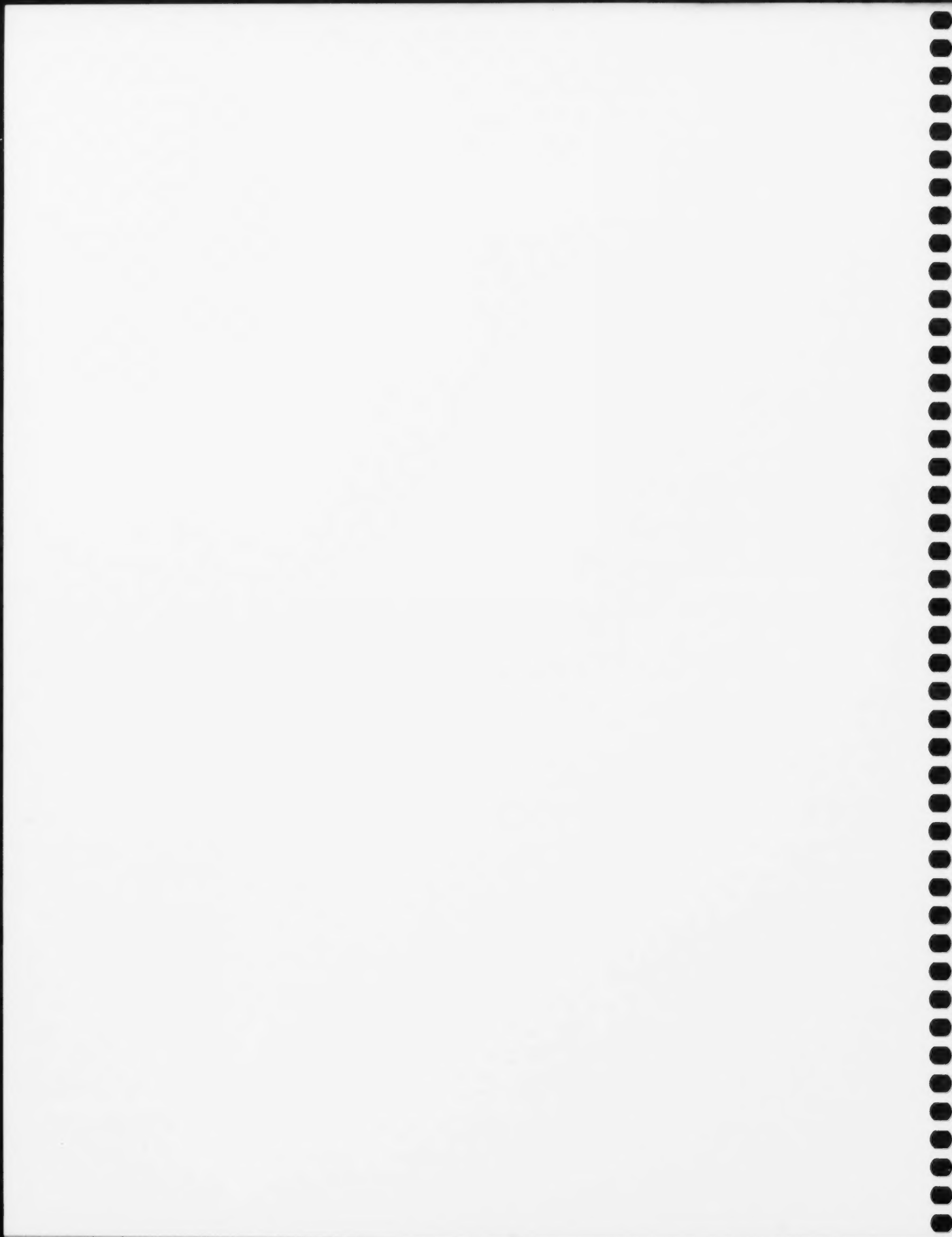
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SECTION 1 – Drivers, Vehicle and Collision Rates: Historical Trends





Introduction

This section calculates involvement rates for total collisions as well as for fatal, injury and property damage only (PDO) collisions using licensed drivers and vehicles registered for the years 1999 to 2008 inclusive. This section also deals with relative involvement rates of drivers by specific age groups.

Key Highlights

In 2008, there were a total of 27,161 collisions reported to law enforcement agencies in Manitoba. Of these:

- 85 involved a fatality (0.3% of all collisions);
- 5,996 involved an injury, but not a fatality (22.1% of all collisions); and,
- 21,080 involved property damage only (77.6% of all collisions).

Overall collisions in Manitoba decreased compared to 2007 and to the previous 5-year average (2003 to 2007 inclusive). There were:

- 27,161 collisions in 2008;
- 29,531 collisions in 2007; and,
- 32,879 collisions on average in the 5-year period 2003 to 2007.

Further, relative involvement in collisions in Manitoba continues to decrease. 2008 represents the fifth year in a row where a decline in relative involvement (per 10,000 licensed drivers) has been recorded and the second year in a row where the decrease has been approximately 10%.

- 2008 relative involvement in collisions (per 10,000 licensed drivers): 355.0
- Relative involvement in collisions in 2008 (per 10,000 licensed drivers) is down 9.5% from 2007 (392.5 per 10,000 licensed drivers) and is 22.2% lower than the previous 5-year average (2003 to 2007; 456.5 per 10,000 licensed drivers).

Given the small number of fatal collisions overall in any given year, the decreases noted in 2008 total number of collisions and relative involvement in collisions can mostly be attributed to a fall in the number and rate of involvement in injury collisions and property damage only collisions.

Major Elements Examined

Counts of collisions in Manitoba for 2008 and previous years are taken from Traffic Accident Reports (TAR) completed by law enforcement agencies and compiled by Manitoba Public Insurance. These counts are presented for all reportable collisions, for fatal collisions, for injury collisions and for property damage only (PDO) collisions.

Relative involvement in collisions is calculated for total collisions and for collisions of different severity (fatal, injury and PDO). It is calculated both for licensed drivers and for vehicles registered. Relative involvement per 10,000 licensed drivers by different age groups is also examined.

The reader is strongly cautioned when interpreting results regarding fatal collisions. Due to the small numbers of these types of collisions, fluctuations year-over-year could be dramatic; a small change in the total count of these types of collisions could have a significant effect on statistics such as percentage change to previous years and relative involvement rates.

When comparing historical results of relative involvement rates per 10,000 licensed drivers, the reader is cautioned to note that data from 1999 to 2002 used a different methodology when counting the population of licensed drivers than has been recently implemented for this report. While presented here, it should be noted that calculations in these years are not directly comparable to the calculations for 2003 to 2008.

Terms and Definitions**"Reportable Collision"**

- Motor vehicle collisions resulting in a fatality, injury or property damage in excess of \$1,000 are required by law to be reported to a law enforcement agency. Subsequently, the law enforcement agency completes a Traffic Accident Report for the collision. This report deals with these reportable collisions and the Traffic Accident Reports arising from them.

"Fatal Collision"

- A motor vehicle collision in which at least one person is killed as a result of the collision. The death must have occurred within thirty days of the collision occurrence.

"Injury Collision"

- A motor vehicle collision in which at least one person has been recorded as sustaining some level of personal injury, but in which no one is fatally injured or killed. Levels of injury include: 'major' (admitted to hospital); 'minor' (treated and released from hospital); and, 'minimal' (no hospital treatment required).

"Property Damage Only (PDO) Collision"

- A motor vehicle collision in which no injury or fatality is sustained and only property damage is the result.

"Relative Involvement"

- A calculation of the number of collisions per specific unit of licensed drivers or registered vehicles. For the purposes of this report, relative involvement is calculated per 10,000 licensed drivers or registered vehicles.

"Licensed drivers"

- A count of all Manitobans aged 16 and older who hold a valid licence within the licensing year including active and suspended drivers. (See *Section 2 Licensed Drivers* for more information)

Table 1-1 Fatal, Injury and Property Damage Collisions by Total Licensed Drivers

Table 1-1
 Fatal, Injury, and Property Damage Collisions
 by Total Licensed Drivers: 1999 to 2008

Year	Licensed Drivers	Total Collisions	Collisions /10,000 Drivers	Total Fatal	Fatal /10,000 Drivers	Total Injury	Injury /10,000 Drivers	Total PDO	PDO /10,000 Drivers
1999*	702,851	28,667	407.9	99	1.4	6,959	99.0	21,609	307.4
2000*	706,512	30,973	438.4	92	1.3	6,931	98.1	23,950	339.0
2001*	695,747	30,999	445.5	82	1.2	6,656	95.7	24,261	348.7
2002*	700,169	31,983	456.8	99	1.4	6,953	99.3	24,931	356.1
2003	703,889	34,820	494.7	95	1.3	7,283	103.5	27,442	389.9
2004	711,488	35,060	492.8	90	1.3	6,867	96.5	28,103	395.0
2005	716,169	33,210	463.7	88	1.2	6,497	90.7	26,625	371.8
2006	724,330	31,774	438.7	104	1.4	6,516	90.0	25,154	347.3
2007	752,398	29,531	392.5	96	1.3	6,425	85.4	23,010	305.8
2008	765,014	27,161	355.0	85	1.1	5,996	78.4	21,080	275.6
2003-07 Average	721,655	32,879	456.5	94.6	1.3	6,718	93.2	26,067	361.9

*NOTE: Data from 1999 to 2002 used a different methodology when counting the population of licensed drivers than has been recently implemented for this report and is therefore not exactly comparable to the calculations for 2003 to 2008.

Relative to ten years ago, the total number of collisions in 2008 has decreased by 5% (27,161 in 2008 compared to 28,667 in 1999). More importantly, the relative involvement (per 10,000 drivers) in collisions has decreased by 13% in the same time period (355.0 in 2008 compared to 407.9 in 1999). Compared to 2007, total collisions have decreased by 8% (down from a total of 29,531) while relative involvement has decreased by nearly 10%. Compared to the previous 5-year average (2003 to 2007), total collisions have decreased 17% and relative involvement has fallen by 22%.

Collision counts of different severities are also all down in 2008 compared to historical figures.

- Fatal collisions have decreased by 14% compared to 1999, by 11% compared to 2007 and by 10% compared to the previous 5-year average.
- Injury collisions have decreased by 14% compared to 1999, by 7% compared to 2007 and by 11% compared to the previous 5-year average.
- PDO collisions have decreased by 2% compared to 1999, by 8% compared to 2007 and by 19% compared to the previous 5-year average.

Table 1-2 Percentage Change Year-over-Year in Relative Involvement (per 10,000 Licensed Drivers) in Fatal, Injury, and Property Damage Only Collisions

Table 1-2

Percentage Change Year-Over-Year in Relative Involvement Rate (per 10,000 Licensed Drivers)
in Fatal, Injury, and PDO Collisions: 1999 to 2008

Year	Collisions /10,000 Drivers	% change to previous year	Fatal /10,000 Drivers	% change to previous year	Injury /10,000 Drivers	% change to previous year	PDO /10,000 Drivers	% change to previous year
1999	407.9	-	1.4	-	99.0	-	307.4	-
2000	438.4	7.5%	1.3	-7.6%	98.1	-0.9%	339.0	10.3%
2001	445.5	1.6%	1.2	-9.5%	95.7	-2.5%	348.7	2.9%
2002	456.8	2.5%	1.4	20.0%	99.3	3.8%	356.1	2.1%
2003	494.7	8.3%	1.3	-4.5%	103.5	4.2%	389.9	9.5%
2004	492.8	-0.4%	1.3	-6.3%	96.5	-6.7%	395.0	1.3%
2005	463.7	-5.9%	1.2	-2.9%	90.7	-6.0%	371.8	-5.9%
2006	438.7	-5.4%	1.4	16.9%	90.0	-0.8%	347.3	-6.6%
2007	392.5	-10.5%	1.3	-11.1%	85.4	-5.1%	305.8	-11.9%
2008	355.0	-9.5%	1.1	-12.9%	78.4	-8.2%	275.6	-9.9%
2003-07 Average*	456.5	-2.8%	1.3	-1.6%	93.2	-2.9%	361.9	-2.7%

*The "% change to previous year" for "2003-07 Average" is an average rate of change for the time period 2003 to 2007.

Recognizing that collision counts could be impacted either positively or negatively by changing population statistics, relative involvement rates per 10,000 licensed drivers is examined to provide a standardized collision rate comparison. This eliminates the effect of changing population size and focuses on how many drivers are being involved in collisions instead of simply a raw count of collisions overall.

Relative involvement (per 10,000 licensed drivers) in collisions is down overall as well as for collisions of different severities. The relative involvement per 10,000 drivers in collisions in 2008 is:

- 355.0 for all collisions, down nearly 10% compared to 2007 and 22% lower than the previous 5-year (2003 to 2007) average;
- 1.1 for fatal collisions, down 13% from 2007 and 15% from the previous 5-year average;
- 78.4 for injury collisions, down 8% from 2007 and 16% from the previous 5-year average; and,
- 275.6 for PDO collisions, down 10% from 2007 and 24% from the previous 5-year average.

The downward trend in collision rates and involvement has continued in 2008. In the previous five years, collisions overall have been decreasing by an average of 2.8% each year; 2008's decline of 9.5% compared to 2007 is more than three times that average rate of decrease. The decreases in collision rates for collisions of different severities in 2008 are also ahead of the previous 5-year trends by substantial margins.

Table 1-3 Fatal, Injury and Property Damage Collisions by Vehicles Registered

Table 1-3
 Fatal, Injury, and Property Damage Collisions
 by Vehicles Registered: 2002 to 2008

Year	Vehicles Registered *	Total Collisions	Collisions /10,000 Vehicles	Total Fatal	Fatal /10,000 Vehicles	Total Injury	Injury /10,000 Vehicles	Total PDO	PDO /10,000 Vehicles
2002	707,802	31,983	451.9	99	1.4	6,953	98.2	24,931	352.2
2003	714,170	34,820	487.6	95	1.3	7,283	102.0	27,442	384.3
2004	725,590	35,060	483.2	90	1.2	6,867	94.6	28,103	387.3
2005	730,838	33,210	454.4	88	1.2	6,497	88.9	26,625	364.3
2006	740,636	31,774	429.0	104	1.4	6,516	88.0	25,154	339.6
2007	753,705	29,531	391.8	96	1.3	6,425	85.2	23,010	305.3
2008	773,596	27,161	351.1	85	1.1	5,996	77.5	21,080	272.5
2003-07 Average	732,988	32,879	449.2	95	1.3	6,718	91.7	26,067	356.2

*Vehicles registered exclude off-road vehicles, non-commercial snow vehicles, non-commercial trailers, non-farm tractors and PSV trailers.

Relative involvement in collisions per 10,000 vehicles registered is another way to view collision rates in a standardized format. It attempts to account for fluctuations in the total number of vehicles registered for use on Manitoba roadways.

In 2008, there are 351.1 collisions for every 10,000 vehicles registered in Manitoba. This represents a 10% decrease from the rate in 2007. Over the previous five years (2003 to 2007), the rate of collisions per 10,000 vehicles registered has steadily declined at an average of 2.6% less each year, including the 8% increase from 2002 to 2003.

The rate of involvement in collisions of different severity has also been decreasing in recent years. In 2008, there are 1.1 fatalities for every 10,000 vehicles, down from 1.3 in 2007 and 1.3 on average in the previous five years. Involvement rates for injury and PDO collisions are both the lowest they've been since this report started tracking involvement rates in this fashion. Involvement in injury collisions is down 16% compared to the previous 5-year average while involvement in PDO collisions is down 23% compared to the previous 5-year average.

Relative involvement rates between 2003 and 2008 for collisions in Manitoba, both per 10,000 licensed drivers and per 10,000 registered vehicles, are noted in Figures 1-1, 1-2, 1-3 and 1-4 on the following pages.

Figure 1-1 Relative Involvement in Total Collisions by Licenced Drivers and Vehicles Registered: 2003 to 2008

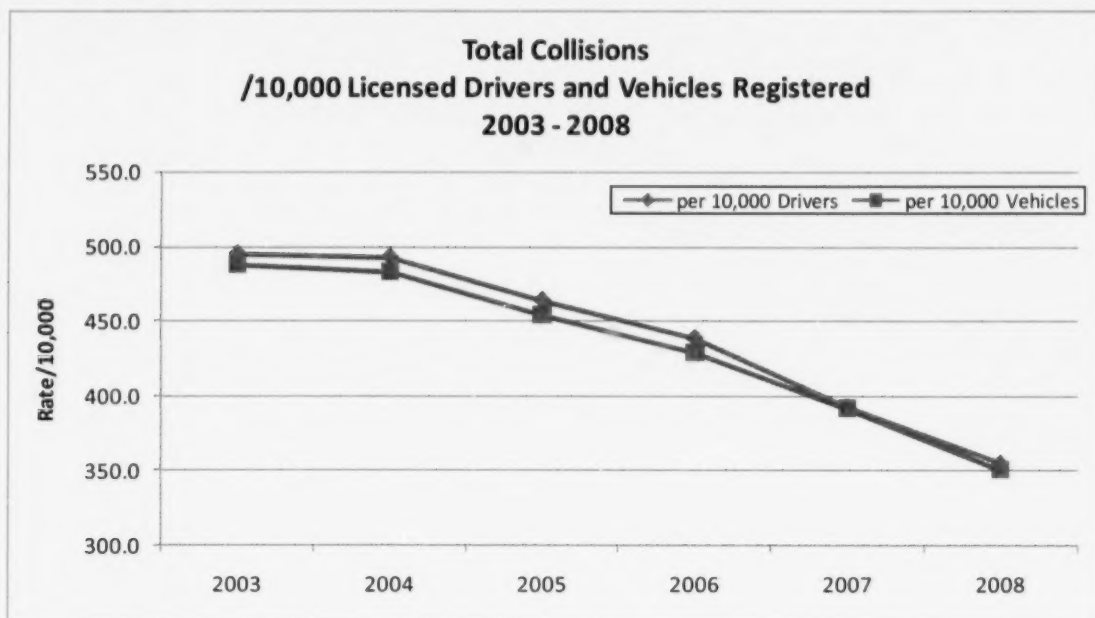


Figure 1-2 Relative Involvement in Fatal Collisions by Licenced Drivers and Vehicles Registered: 2003 to 2008

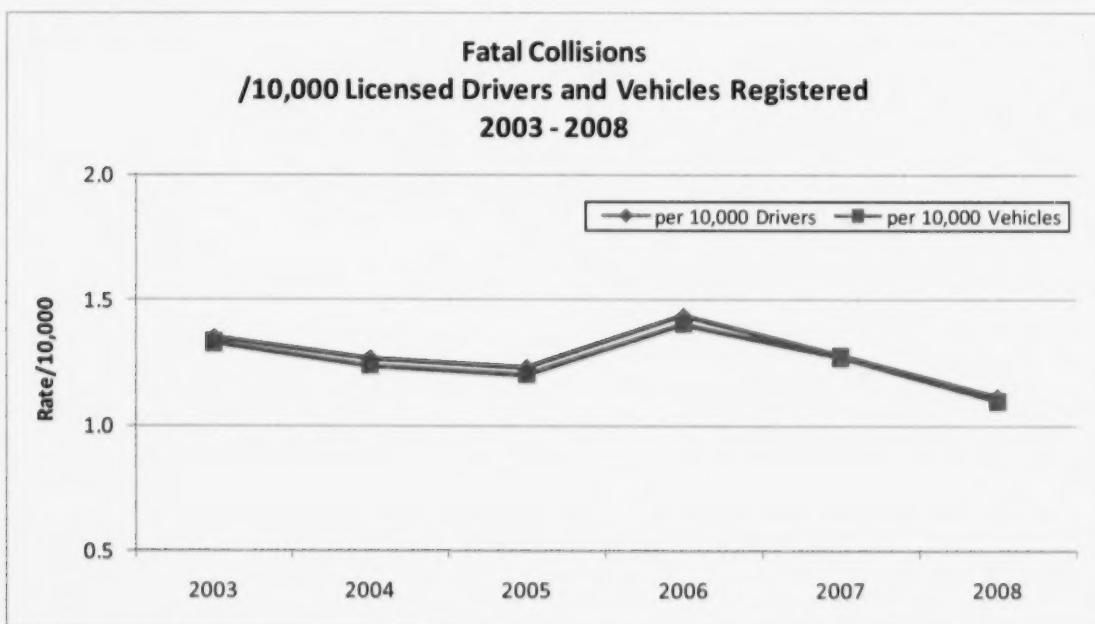


Figure 1-3 Relative Involvement in Injury Collisions by Licenced Drivers and Vehicles Registered: 2003 to 2008

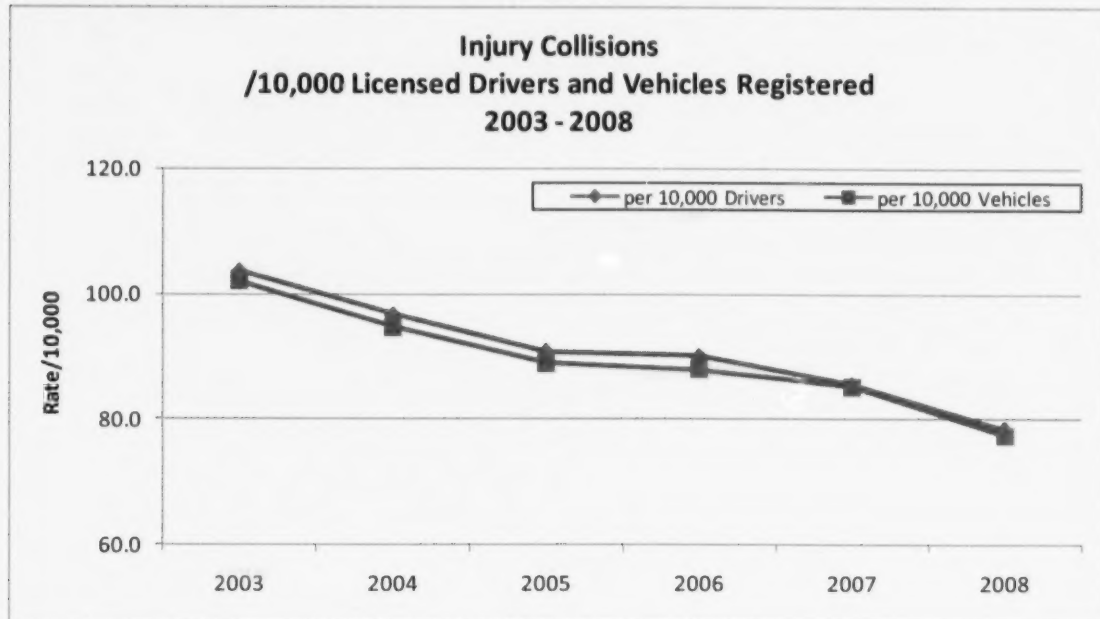


Figure 1-4 Relative Involvement in Property Damage Only Collisions by Licenced Drivers and Vehicles Registered: 2003 to 2008

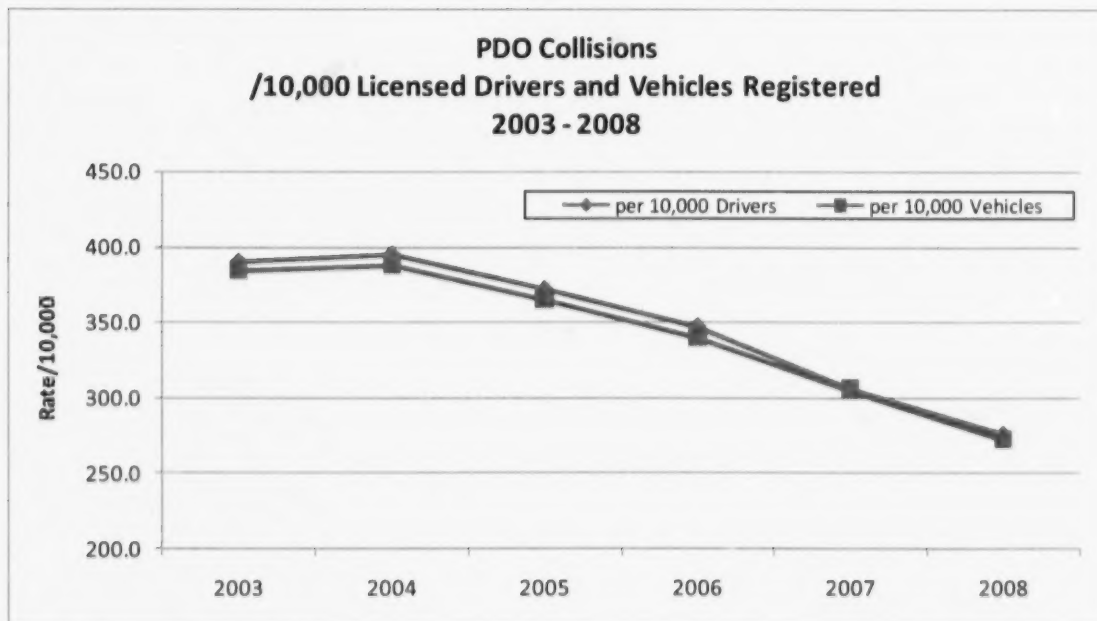


Table 1-4 Relative Involvement (Total Collisions) per 10,000 Licensed Drivers by Age GroupTable 1-4
Relative Involvement (Total Collisions) /10,000 Licensed Drivers by Age Group: 1999 to 2008

Age Group	Year										2003-2007 Average
	1999*	2000*	2001*	2002*	2003	2004	2005	2006	2007	2008	
16-19	1240	1210	1150	1170	1188.7	1156.0	1045.0	1011.0	888.4	803.2	1057.8
20-24	910	890	810	840	957.7	958.1	873.3	829.6	764.4	713.2	876.6
25-34	640	620	570	600	689.8	690.7	647.8	607.4	555.8	523.9	638.3
35-44	530	530	480	530	631.1	650.9	611.8	563.8	509.8	478.1	593.5
45-54	470	460	440	460	572.8	559.1	544.7	513.5	467.4	429.1	531.5
55-64	420	400	380	400	497.1	513.8	480.4	446.9	412.9	366.7	470.2
65-74	360	370	340	360	430.4	419.7	401.4	382.5	337.3	316.2	394.3
75>	380	380	380	360	390.5	362.2	348.3	347.9	292.7	247.7	348.3

*NOTE: Data from 1999 to 2002 used a different methodology when counting the population of licensed drivers than has been recently implemented for this report and is therefore not exactly comparable to the calculations for 2003 to 2008.

As age increases, relative involvement in collisions decreases. The youngest drivers in Manitoba continue to have the highest rates of involvement in collisions. Those aged 16 to 19 have a relative involvement of 803.2, which is:

- 12% higher than those aged 20 to 24;
- 53% higher than those aged 25 to 34;
- 68% higher than those aged 35 to 44;
- 87% higher than those aged 45 to 54;
- More than twice that of those aged 55 to 64; and,
- Nearly three times that of those aged 65 and older.

Manitobans aged 20 to 24, while having a lower relative involvement rate than drivers younger than them, also have substantially higher involvement rates than drivers in older age brackets. At 713.2, the relative involvement rate of drivers aged 20 to 24 is:

- 36% higher than those aged 25 to 34;
- 49% higher than those aged 35 to 44;
- 66% higher than those aged 45 to 54;
- 94% higher than those aged 55 to 64; and,
- More than two and a half times that of those aged 65 and older.

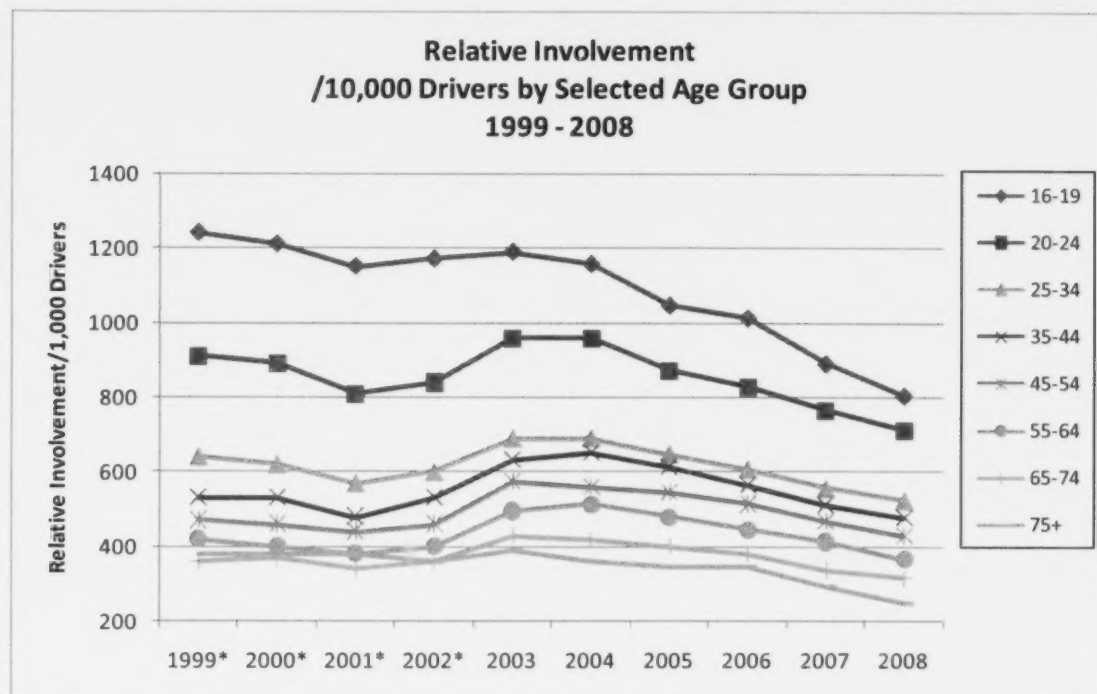
While differences do exist between the relative involvement rates of drivers in subsequent age brackets, the percentage differences between groups are much smaller.

Relative collision involvement rates for drivers of all age groups continued to decline in 2008, a trend evident since 2004. Older drivers, those aged 55 and over, showed the largest percentage declines when compared to 2007, while drivers aged 20 to 44 showed the lowest. When compared to the previous 5-year average, all age groups show substantial percentage decreases in 2008, with the largest decreases coming in the oldest (aged 75 and over) and youngest (aged 16 to 19) brackets.

Percentage decreases in relative involvement per 10,000 licensed drivers in 2008 by age group:

- Age 16 to 19 – 2008 involvement is down 10% compared to 2007 and down 24% compared to the previous 5-year average (2003 to 2007).
- Age 20 to 24 – 2008 involvement is down 7% compared to 2007 and down 19% compared to the previous 5-year average (2003 to 2007).
- Age 25 to 34 – 2008 involvement is down 6% compared to 2007 and down 18% compared to the previous 5-year average (2003 to 2007).
- Age 35 to 44 – 2008 involvement is down 6% compared to 2007 and down 19% compared to the previous 5-year average (2003 to 2007).
- Age 45 to 54 – 2008 involvement is down 8% compared to 2007 and down 19% compared to the previous 5-year average (2003 to 2007).
- Age 55 to 64 – 2008 involvement is down 11% compared to 2007 and down 22% compared to the previous 5-year average (2003 to 2007).
- Age 65 to 74 – 2008 involvement is down 6% compared to 2007 and down 20% compared to the previous 5-year average (2003 to 2007).
- Age 75 and over – 2008 involvement is down 15% compared to 2007 and down 29% compared to the previous 5-year average (2003 to 2007).

Figure 1-5 Relative Involvement (per 10,000 Licensed Drivers) in Total Collisions by Age Group





SECTION 2 – Licensed Drivers



Introduction

This section deals with Active and Suspended Drivers by specific Age Groups, Gender and Manitoba Licence Class.

Key Highlights

There is an average of 765,014 licensed drivers in Manitoba in 2008, an increase of 1.7% compared to 2007. Of these:

- 97% are Active drivers, 3% are Suspended drivers;
- 52% are Male, 48% are Female;
- 70% are between the ages of 25 and 64; and,
- Men account for 75% of all Suspended drivers in Manitoba.

There is an average of 58,486 licensed motorcycle drivers in Manitoba in 2008.

Major Elements Examined

Counts of licensed drivers in Manitoba for 2008 represent an average for the 2008 calendar year. That is, "point-in-time" observations (licensed drivers by age, licence class and gender) are recorded as of the first of each month and then an average for the year is calculated and reported. Due to rounding in this process, some columns and rows may not add to the total. This is different from previous years. In the past, licensed driver counts as of the end of December (recorded on January 1st the following year) were adjusted according to the average monthly proportion of total drivers by gender, age and class for the previous year. To enable historical comparisons of licensed driver counts, data reported here for the years 2001 through 2007 have been adjusted to reflect this methodology change. Information regarding the monthly count of Class 6 licence holders was not available for years prior to 2003; the historical count of Class 6 licence holders has not been adjusted to reflect the new methodology for the years 2001 and 2002.

At the beginning of this section, there is a quick reference chart of Manitoba's Driver Licence and Vehicle Class descriptions. A review of these charts will indicate which Driver Licence Class is required to operate specific Vehicle Classes.

In view of the fact it is a requirement for Class 6 licence holders to first possess a Class 1-5 licence prior to obtaining a Class 6 licence, Class 1 to 5 licence holders are discussed separately from Class 6 licence holders to avoid duplication of licence counts. Tables 2-6, 2-7, 2-8, 2-9 and 2-10 consider the number of Class 6 active motorcycle licensed drivers by Gender, Age Group and Driver Licence Class.

Terms and Definitions

"Licence Class"

- A Manitoba Driver's Licence of a specific level which permits the holder to operate vehicles within a specific Vehicle Class

"Vehicle Class"

- Category of vehicles meeting specific designations and specifications

"Active drivers"

- Drivers holding an active Manitoba Driver's Licence of any specific Licence Class








"Suspended drivers"

- Drivers holding a Manitoba Driver's Licence of any specific Licence Class who have been disqualified from driving for some reason. Although the list is extensive, some possible suspensions could be for driving violations, medical conditions, administrative suspensions and criminal code convictions.

"Graduated Driver Licensing (GDL)"

- A three-stage program designed to help new drivers, regardless of age, acquire the knowledge and skill needed to safely operate a motor vehicle. Each licence stage has specific rules and restrictions governing when and under what circumstances the holder is allowed to operate a motor vehicle, enabling novice drivers to gain more experience under a greater variety of driving conditions. Both Class 5 and Class 6 licences have a GDL stage associated with them.
- Three stages of GDL: Learner (5/L or 6/L); Intermediate (5/I or 6/I); and, Full (5/F or 6/F).
- To view a full discussion of the GDL program in Manitoba, please visit:
 - http://www.mpi.mb.ca/PDFs/DVL_PDFs/GDLGuide.pdf; ou en Français,
 - http://www.mpi.mb.ca/PDFs/DVL_PDFs/GDLGUIDEfr.pdf

The Class Licence System

Manitoba Licence Class	Allows the Licence Holder to Operate	Minimum Age	Requirements
1 	Semi-trailer trucks including all vehicles in Classes 2, 3, 4, and 5.	18	<ul style="list-style-type: none"> • Must hold a minimum Class 5 Intermediate or Class 5 Authorized Instruction licence to obtain authorized instruction in Classes 1-4. • Must pass written or oral knowledge test. • Requires supervising driver for Authorized Instruction. • Must pass road test. For Classes 1, 2, 3 or 4 (buses and trucks only), the test includes a pre-trip inspection of vehicle (and air brake system if applicable) by the applicant.
2 	Buses ¹ having a seating capacity of over 24 passengers (while carrying passengers), school buses ² having a seating capacity over 36 passengers (while carrying passengers). Includes all vehicles in Classes 3, 4 and 5.		
3 	Trucks with more than two axles, including any combination of vehicles, OR a truck with two axles towing a vehicle with a registered gross vehicle weight of more than 4,540 kg (but does not include a semi-trailer truck). Includes all vehicles in Classes 4 and 5.		
4 	Taxis, ambulances, and other emergency vehicles, buses ¹ with a seating capacity between 10 and 24 passengers (while carrying passengers) and school buses ² with a seating capacity between 10 and 36 passengers (while carrying passengers). Includes all vehicles in Class 5.		
5 	<p>Passenger cars, a bus while not carrying passengers, trucks with two axles, and any combination of vehicles consisting of a truck with two axles and a towed vehicle with a registered gross vehicle weight of up to 4,540 kg. May operate Class 3 vehicles if registered as a farm truck and the driver holds a Class 5 Intermediate or Full Stage Licence.</p> <p>May operate a Moped³, if 16 years of age or older.</p> <p><i>Note: A person must hold a valid minimum Class 5 Intermediate Stage driver's licence to operate a special mobile machine, implement of husbandry or tractor on a provincial highway, or a highway within the municipal boundaries of a city, town, village or urban municipality. For further information please call 204-985-7000 or toll-free 1 800-665-2410.</i></p>	16 or 15½ if enrolled in high school driver education course	<ul style="list-style-type: none"> • Must pass written or oral knowledge and sign tests for Class 5 Learner licence (minimum nine-month Learner Stage). (Must wait seven days for re-tests.) • Requires supervising driver for a Class 5 Learner Stage or Authorized Instruction. • Requires supervising driver for a Class 5 Intermediate if carrying more than one passenger between the hours of 12 midnight and 5 a.m. • Must pass road test to advance to the Intermediate Stage (minimum 15-month Intermediate Stage). (Must wait 14 days for re-test.)
6 	Motorcycles.	16	<ul style="list-style-type: none"> • Driver must hold a valid licence of any class and stage. • Must pass written or oral knowledge test. (Must wait seven days for re-tests.) • Must obtain Class 6 M Stage licence in order to complete motorcycle training course. The course is required before Learner Stage Licence is issued. (Contact Manitoba Safety Council for motorcycle course charges.) • Minimum nine-month Learner Stage. • Must pass road test to advance to the Intermediate Stage (minimum 15-months Intermediate Stage). (Must wait 14 days for re-test.)
Air Brake Endorsement 	Air Brake Endorsement—permits the holder to drive vehicles equipped with Air Brakes in the class of vehicle for which the person is licensed. Drivers of a Class 3 truck registered as a farm truck equipped with air brakes are exempt from this requirement.		<ul style="list-style-type: none"> • Must pass written or oral test. • Must pass Air Brake practical test for "A" (Authorized) endorsement. • Must pass adjustment of the manual slack adjusters for "S" (Slack Adjuster) endorsement. • There is no additional charge for the Air Brake practical test if it is completed at the same time you are road-tested for a higher class of licence.

1. A bus is any vehicle with a seating capacity of at least 11 persons (including the driver) used primarily to carry passengers. It excludes vehicles used for personal transportation by the owner or with the owner's permission.
2. School bus certificate is required. For further information contact the Manitoba Education, Training and Youth. Pupil Transportation at 204-945-6900.
3. Mopeds are not allowed to be driven on highways with a speed limit exceeding 80 km/h, but may cross these highways.

Table 2-1 Class 1-5 Licensed Drivers by Year and Driver Status

Table 2-1
Class 1-5 Licensed Drivers by Year and Driver Status: 2001 to 2008

Licensing Year	Active Drivers	Suspended Drivers	Total Drivers	% Change to Previous Year
2001	674,921	20,826	695,747	-
2002	679,219	20,950	700,169	0.6%
2003	683,060	20,829	703,889	0.5%
2004	690,568	20,919	711,488	1.1%
2005	695,091	21,077	716,169	0.7%
2006	703,051	21,279	724,330	1.1%
2007*	728,047	24,351	752,398	3.9%
2008	744,049	20,965	765,014	1.7%
Average 2003-2007	699,964	21,691	721,655	1.5%

*The count of "Suspended Drivers" in 2007 is artificially inflated due to a system error that was later corrected to recode licences displayed as suspended, but not actually suspended.

Compared to 2007, the total number of licensed drivers in Manitoba in 2008 increased slightly, climbing 1.7% to 765,014. This increase is in line with historical increases seen in recent years; the rate of change over the past five years (2003-2007) was a 1.5% increase on average each year.

The proportion of suspended drivers fell by nearly fourteen percent in 2008, down to 20,965 from 24,351 in 2007. The count of suspended drivers in 2008 appears to be much more in line with historical figures prior to 2007. The inflated count of suspended drivers in 2007 was likely due to a system error where several thousand licences were displayed as "suspended" when in fact they were not. This display error has since been corrected.

Table 2-2 Class 1-5 Licensed Drivers by Age Group, Gender and Driver Status

Table 2-2
Class 1-5 Licensed Drivers by Age Group, Gender and Driver Status: 2008

Age Group	Gender	Active Drivers	Suspended Drivers	Total Drivers	% of "All Ages"	% Suspended in Category
16-17	Male	11,201	96	11,297	2.8	0.8
	Female	10,757	29	10,787	2.9	0.3
	Total	21,959	125	22,083	2.9	0.6
18-19	Male	12,295	365	12,660	3.2	2.9
	Female	11,778	74	11,852	3.2	0.6
	Total	24,073	439	24,512	3.2	1.8
20-24	Male	30,786	1,163	31,949	8.0	3.6
	Female	29,919	249	30,168	8.2	0.8
	Total	60,706	1,412	62,117	8.1	2.3
25-34	Male	60,820	2,345	63,166	15.9	3.7
	Female	59,524	535	60,059	16.3	0.9
	Total	120,345	2,880	123,225	16.1	2.3
35-44	Male	68,553	2,526	71,079	17.9	3.6
	Female	66,373	681	67,054	18.2	1.0
	Total	134,926	3,207	138,133	18.1	2.3
45-54	Male	79,829	2,691	82,520	20.8	3.3
	Female	75,694	675	76,369	20.8	0.9
	Total	155,523	3,366	158,889	20.8	2.1
55-64	Male	59,914	1,648	61,562	15.5	2.7
	Female	56,219	503	56,722	15.4	0.9
	Total	116,133	2,151	118,284	15.5	1.8
65-74	Male	34,326	1,177	35,503	8.9	3.3
	Female	31,299	468	31,767	8.6	1.5
	Total	65,625	1,646	67,271	8.8	2.4
75-84	Male	19,429	1,658	21,086	5.3	7.9
	Female	17,697	829	18,526	5.0	4.5
	Total	37,126	2,487	39,612	5.2	6.3
85+	Male	4,233	2,126	6,359	1.6	33.4
	Female	3,401	1,128	4,529	1.2	24.9
	Total	7,635	3,254	10,888	1.4	29.9
All Ages	Male	381,387	15,794	397,181	100.0	4.0
	Female	362,662	5,171	367,833	100.0	1.4
	Total	744,049	20,965	765,014	100.0	2.7

In 2008, the proportion of suspended drivers among those aged 75 or older is more than five times the proportion of suspended drivers among those under age 75 (11.4% of drivers aged 75 or older are suspended; 2.1% of drivers aged 16 to 74 are suspended). This difference in proportion of suspended drivers between older and younger Manitobans is in line with the historical trend.

Table 2-3 Class 1-5 Licensed Drivers by License Class, Driver Status and Gender

Table 2-3
Class 1-5 Licensed Drivers by License Class, Driver Status and Gender: 2008

License Class	Active Drivers				Suspended Drivers				Total	%
	Male	Female	SubTotal	%	Male	Female	SubTotal	%		
1	33,412	1,400	34,812	4.7	593	13	606	2.9	35,418	4.6
2	4,703	1,619	6,322	0.8	59	9	68	0.3	6,390	0.8
3	10,110	302	10,411	1.4	187	3	190	0.9	10,601	1.4
4	12,477	4,339	16,815	2.3	339	42	380	1.8	17,196	2.2
5/F	300,552	330,007	630,558	84.7	13,077	4,497	17,574	83.8	648,133	84.7
5/I	8,589	8,164	16,753	2.3	245	53	298	1.4	17,051	2.2
5/L	9,649	13,391	23,040	3.1	270	126	396	1.9	23,436	3.1
5/A	1,889	3,441	5,330	0.7	288	130	418	2.0	5,748	0.8
Other	7	0	7	<0.1	736	298	1,034	4.9	1,041	0.1
Total	381,387	362,662	744,049	100.0	15,794	5,171	20,965	100.0	765,014	100.0

Manitoba Class 5 Driver's Licence Stages:

- 5/F Full Class 5 licence (including Full Stage Class 5 under Graduated Driver Licensing)
- 5/I Intermediate Stage under Graduated Driver Licensing
- 5/L Learner Stage under Graduated Driver Licensing
- 5/A Learner drivers who are not in Graduated Driver Licensing
- Other Unlicensed drivers assigned a licence number

The vast majority of Manitobans with a licence hold a Full Class 5 (85%). Novice drivers, holding either Learner (5/L) or an Intermediate (5/I) Stage licence, account for the next largest group (5% of all licensed drivers in Manitoba), closely followed by Class 1 licensed drivers.

Very little has changed in the proportion and number of licence holders by class when comparing 2008 to 2007.

Table 2-4 Class 1-5 Male Drivers by Age Group, Driver Status and License Class

Table 2-4
Class 1-5 Male Drivers by Age Group, Driver Status and License Class: 2008

Age Group	Status	Licence Class										Total
		1	2	3	4	1-4/A	5/F	5/I	5/L	5/A	5 Other	
16-17	Active	0	0	0	0	0	738	5,226	5,236	0	0	11,201
	Suspended	0	0	0	0	0	8	63	24	0	0	96
	Subtotal	0	0	0	0	0	746	5,290	5,260	0	0	11,297
18-19	Active	73	2	21	45	1	8,564	1,846	1,737	8	0	12,295
	Suspended	1	0	0	1	0	237	82	44	0	0	365
	Subtotal	74	2	21	46	1	8,801	1,928	1,781	8	0	12,660
20-24	Active	959	43	327	717	2	26,121	873	1,395	350	0	30,786
	Suspended	14	0	7	8	0	856	78	123	64	12	1,163
	Subtotal	973	43	334	725	2	26,978	952	1,517	413	12	31,949
25-34	Active	5,014	334	1,245	2,991	3	49,354	402	753	725	0	60,820
	Suspended	86	2	18	42	0	1,821	16	60	95	206	2,345
	Subtotal	5,100	336	1,262	3,033	3	51,175	418	814	820	206	63,166
35-44	Active	8,280	866	1,800	3,361	2	53,319	180	346	400	0	68,553
	Suspended	138	16	29	81	0	1,962	4	14	47	235	2,526
	Subtotal	8,418	882	1,829	3,442	2	55,281	184	360	446	235	71,079
45-54	Active	10,282	1,594	3,485	3,268	0	60,757	49	139	254	0	79,829
	Suspended	151	24	57	94	0	2,171	0	3	27	164	2,691
	Subtotal	10,433	1,618	3,542	3,362	0	62,928	50	142	281	164	82,520
55-64	Active	6,590	1,377	2,439	1,789	0	47,589	10	33	87	0	59,914
	Suspended	107	8	37	71	0	1,357	1	1	11	54	1,648
	Subtotal	6,697	1,384	2,476	1,860	0	48,947	11	35	99	54	61,562
65-74	Active	2,003	438	703	275	0	30,852	2	8	45	0	34,326
	Suspended	67	6	23	27	0	1,034	0	0	8	13	1,177
	Subtotal	2,070	444	726	301	0	31,886	3	9	53	13	35,503
75-84	Active	210	50	89	31	0	19,037	0	1	12	0	19,429
	Suspended	22	4	11	9	0	1,575	0	0	22	14	1,658
	Subtotal	232	54	100	40	0	20,611	0	1	34	14	21,086
85+	Active	2	0	2	1	0	4,220	0	0	9	0	4,233
	Suspended	6	1	5	6	0	2,057	0	0	14	37	2,126
	Subtotal	8	1	7	7	0	6,277	0	0	23	37	6,359
Total	Active	33,412	4,703	10,110	12,477	7	300,552	8,589	9,649	1,889	0	381,387
	Suspended	593	59	187	339	0	13,077	245	270	288	736	15,794
	Total	34,005	4,763	10,297	12,815	7	313,629	8,834	9,919	2,177	736	397,181

Men aged 45 to 54 make up the largest number of licensed drivers in Manitoba (11% of all drivers; 21% of all male drivers). They also account for the largest proportion of suspended drivers under the age of 75 (13% of all suspended drivers), somewhat a reflection of their overall numbers more so than a significantly higher suspension rate. In fact, even though males aged 35 to 44 (12% of all suspended drivers) and 25 to 34 (11% of all suspended drivers) each account for fewer suspended drivers than males aged 45 to 54, their rates of suspension are higher (see Table 2-2).

Table 2-5 Class 1-5 Female Drivers by Age Group, Driver Status and License Class

Table 2-5
Class 1-5 Female Drivers by Age Group, Driver Status and License Class: 2008

Age Group	Status	License Class										Total
		1	2	3	4	1-4/A	5/F	5/I	5/L	5/A	5 Other	
16-17	Active	0	0	0	0	0	645	4,473	5,640	0	0	10,757
	Suspended	0	0	0	0	0	2	17	11	0	0	29
	Subtotal	0	0	0	0	0	647	4,490	5,650	0	0	10,787
18-19	Active	1	0	2	14	0	7,780	1,672	2,306	5	0	11,778
	Suspended	0	0	0	0	0	42	13	19	0	0	74
	Subtotal	1	0	2	14	0	7,822	1,685	2,324	5	0	11,852
20-24	Active	30	8	14	299	0	25,888	954	2,088	638	0	29,919
	Suspended	0	0	0	1	0	153	12	52	28	3	249
	Subtotal	30	8	14	300	0	26,041	966	2,140	666	3	30,168
25-34	Active	190	129	41	1,278	0	54,152	649	1,784	1,301	0	59,524
	Suspended	1	1	0	6	0	370	6	32	47	71	535
	Subtotal	191	130	41	1,284	0	54,522	655	1,817	1,348	71	60,059
35-44	Active	439	412	50	1,316	0	62,036	305	1,029	786	0	66,373
	Suspended	7	2	0	9	0	545	5	9	18	86	681
	Subtotal	446	414	50	1,326	0	62,580	309	1,038	804	86	67,054
45-54	Active	483	673	79	1,060	0	72,423	84	413	479	0	75,694
	Suspended	3	3	2	12	0	575	0	1	6	73	675
	Subtotal	486	677	81	1,072	0	72,998	84	414	485	73	76,369
55-64	Active	232	355	92	339	0	54,902	17	107	175	0	56,219
	Suspended	2	2	0	7	0	457	0	2	6	29	503
	Subtotal	234	357	92	346	0	55,358	17	109	180	29	56,722
65-74	Active	26	40	22	30	0	31,129	10	17	26	0	31,299
	Suspended	0	0	1	2	0	444	0	1	7	13	468
	Subtotal	26	40	23	33	0	31,572	10	18	33	13	31,767
75-84	Active	1	1	2	2	0	17,659	0	7	25	0	17,697
	Suspended	0	1	0	4	0	800	0	0	9	14	829
	Subtotal	1	2	2	6	0	18,459	0	7	34	14	18,526
85+	Active	0	0	0	0	0	3,395	0	0	7	0	3,401
	Suspended	0	0	0	0	0	1,110	0	0	9	8	1,128
	Subtotal	0	0	0	0	0	4,505	0	0	16	8	4,529
Total	Active	1,400	1,619	302	4,339	0	330,007	8,164	13,391	3,441	0	362,662
	Suspended	13	9	3	42	0	4,497	53	126	130	298	5,171
	Total	1,413	1,628	305	4,380	0	334,504	8,217	13,517	3,571	298	367,833

Women aged 45 to 54 make up the largest number of licensed female drivers in Manitoba (10% of all drivers; 21% of all female drivers).

Women account for only 25% of all suspended drivers in Manitoba, even though they account for nearly half (48%) of all licensed drivers. Much different than men, the highest numbers of suspended drivers among women are aged 75 and older.

Table 2-6 Total Class 6 Active Licensed Drivers by YearTable 2-6
Total Class 6 Active Licensed Drivers by Year: 2001 to 2008

Licensing Year	Active Drivers	% Change to Previous Year
2001*	46,784	-
2002*	46,905	-
2003	51,569	-
2004	52,702	2.2%
2005	54,005	2.5%
2006	54,642	1.2%
2007	56,825	4.0%
2008	58,486	2.9%
Average 2003-2007	53,949	2.5%

* Counts in 2001 and 2002 are not comparable to counts in 2003 through 2008. Percentage change to previous year is not calculated due to a change in the methodology.

The number of motorcycle licence holders increased by 2.9% between 2007 and 2008, slightly ahead of the annual average rate of change from 2003 through 2007 (2.5%).

As discussed in the Introduction of this section, virtually all Class 6 Motorcycle licence holders in Manitoba also hold a Class 1-5 licence. This is mainly due to a requirement for those wishing to obtain a Class 6 licence to first obtain a licence in any other class (1-5). Because of this, Class 6 licence holders are counted separately to avoid any duplication of counts with Class 1-5 licence holders.

Also, because a licence suspension is applicable to all licence classes held by a suspended driver, suspended Class 6 licences are not counted or addressed in the following discussion; they have been covered in the previous discussions of suspended Class 1-5 licence holders.

Table 2-7 Class 6 Active Licensed Drivers by Age Group, Gender and Driver Status

Table 2-7

Class 6 Active Licensed Drivers by Age Group and Gender: 2008

Age Group	Gender	Active Drivers	%
16-17	Male	123	0.2
	Female	11	
	Total	134	
18-19	Male	362	0.7
	Female	31	
	Total	393	
20-24	Male	1,972	3.8
	Female	271	
	Total	2,244	
25-34	Male	5,488	10.8
	Female	832	
	Total	6,320	
35-44	Male	10,755	20.8
	Female	1,412	
	Total	12,167	
45-54	Male	19,158	37.0
	Female	2,471	
	Total	21,629	
55-64	Male	11,279	21.3
	Female	1,185	
	Total	12,464	
65-74	Male	2,142	4.0
	Female	180	
	Total	2,322	
75-84	Male	660	1.2
	Female	62	
	Total	722	
85+	Male	87	0.2
	Female	5	
	Total	92	
All Ages	Male	52,026	100.0
	Female	6,460	
	Total	58,486	

Men account for nearly 9 in 10 of all Class 6 licence holders (89% overall). The vast majority of Class 6 licence holders are between the ages 35 and 64 (79%). Not surprising then, men aged 35 to 64 make up 70% of all Class 6 licence holders. Women in the same age group (aged 35 to 64) make up only 9%.

Table 2-8 Class 6 Active Licensed Drivers by License Class, Driver Status and Gender

Table 2-8
 Class 6 Active Licensed Drivers by License Class and Gender: 2008

License Class	Active Drivers			
	Male	Female	Total	%
6/F	44,735	4,512	49,247	84.2
6/I	7	0	7	<0.1
6/L	3,969	1,241	5,210	8.9
6/A	2,049	324	2,372	4.1
6/M	1,267	384	1,650	2.8
Total	52,026	6,460	58,486	100.0

Manitoba Class 6 Driver's Licence Stages

- 6/F Full Class 6 licence (including Full Stage Class 6 under Graduated Driver Licensing)
 6/I Intermediate Stage under Graduated Driver Licensing
 6/L Learner Stage under Graduated Driver Licensing
 6/A Learner drivers who are not in Graduated Driver Licensing
 6/M Licence received after passing written test, entitling holder to take the Motorcycle Training Course

Under Manitoba's Graduated Driver Licensing (GDL) program, novice drivers are only required to complete the Intermediate Stage once. Credit for time served in the Intermediate Stage in Class 6 is given for the Intermediate Stage in Class 5, and vice versa. That is, if a novice driver completes the Intermediate stage of the GDL program for a Class 5 licence, they do not need to repeat the Intermediate stage in order to obtain a Class 6 licence.

In 2008, Full Class 6 licence holders account for 84% of all Manitoba Class 6 licence holders and Learners under the Graduated Driver Licensing program account for 9%. This distribution is similar to 2007.

Table 2-9 Active Class 6 Male Drivers by Age Group and License Class

Table 2-9
Active Class 6 Male Drivers by Age Group and License Class: 2008

Age Group	License Class					Total	% of Total
	6/F	6/I	6/L	6/A	6/M		
16-17	4	6	80	0	34	123	0.2
18-19	54	0	204	0	104	362	0.7
20-24	489	0	1,005	89	389	1,972	3.8
25-34	2,892	0	1,342	809	444	5,488	10.5
35-44	9,262	0	644	692	157	10,755	20.7
45-54	18,280	0	454	329	95	19,158	36.8
55-64	10,961	0	196	94	28	11,279	21.7
65-74	2,060	0	43	28	11	2,142	4.1
75-84	646	0	4	6	5	660	1.3
85+	86	0	0	1	0	87	0.2
Total	44,735	7	3,969	2,049	1,267	52,026	

Table 2-10 Active Class 6 Female Drivers by Age Group and License Class

Table 2-10
Active Class 6 Female Drivers by Age Group and License Class: 2008

Age Group	License Class					Total	% of Total
	6/F	6/I	6/L	6/A	6/M		
16-17	0	0	6	0	5	11	0.2
18-19	2	0	23	0	6	31	0.5
20-24	40	0	151	8	73	271	4.2
25-34	265	0	367	87	113	832	12.9
35-44	855	0	368	115	74	1,412	21.9
45-54	2,018	0	288	85	81	2,471	38.2
55-64	1,091	0	39	26	30	1,185	18.3
65-74	176	0	0	3	2	180	2.8
75-84	61	0	0	1	0	62	1.0
85+	5	0	0	0	0	5	<0.1
Total	4,512	0	1,241	324	384	6,460	

SECTION 3 – Vehicle Registrations



Introduction

This section deals with vehicle registrations and examines these by three major categories: Commercial; Non-commercial; and, Snowmobiles (Recreational).

Key Highlights

There are a total of 808,892 Non-commercial vehicles registered in Manitoba in 2008.

- This is a 3.1% increase over 2007 and a 11.7% increase over 2002
- This is a 4.6% increase over the average registrations for the period 2003-2007
- Motorcycles/mopeds showed the largest percentage increase (vs. 2007) at 10%

There are a total of 85,811 Commercial vehicles registered in Manitoba in 2008.

- This is a 3.4% increase over 2007 and a 12.7% increase over 2002
- This is a 14.7% increase over the average registrations for the period 2003-2007
- Trailers showed the largest percentage increase (vs. 2007) at 10.8%

There are a total of 26,359 Snowmobiles registered in Manitoba in 2008.

- This is a 12.6% increase over 2007 and a 42.6% increase over 2002
- This is a 29.1% increase over the average registrations for the period 2003-2007

Major Elements Examined

Counts for each Commercial and Non-commercial registration types represent an average registration over the twelve-month period January through December 2008. That is, active vehicle registrations as of the first of each month are recorded for each vehicle category and then an average for the year is calculated and reported. Counts for Snowmobiles use a similar "point-in-time" average calculation, but include December 2007 through to and including April 2008 to cover the snowmobile riding season.

Terms and Definitions

"Vehicle Class"

- Category of vehicles meeting specific designations and specifications
- Non-commercial vehicle classes are vehicles registered for private use and include:
 - Passenger
 - Antique
 - Motorcycle/Moped
 - Truck
 - Farm Truck
 - Snow Vehicle
 - Trailer
 - Tractor (non-farm)
- Commercial vehicle classes are those involving vehicles registered to or for the use of a business and include:
 - Truck
 - Public Service Vehicles (PSV) Truck
 - Dealer/Repairer
 - Taxi/Livery
 - PSV Bus
 - Trailers
 - PSV Trailers
- A detailed description of each class noted above can be found in the "Glossary" of the Report

Table 3-1 Non Commercial Vehicle Class

Table 3-1
Non-Commercial Vehicle Class: 2008

Vehicle Class*	Total	%
Passenger	509,856	63.0
Antique	84	<0.1
Motorcycle/Moped	10,059	1.2
Truck	123,766	15.3
Farm Truck	44,073	5.4
Snow Vehicle	47	<0.1
Trailer	120,891	14.9
Tractor (Other than Farm-type)	117	<0.1
Total Vehicles Registered	808,892	100.0
Snowmobiles (Recreational)		
Snowmobiles	26,359	

*For definition of these motor vehicle classes refer to the "Terms and Definitions" of this Section and "Glossary" of this Report.

Table 3-2 Commercial Vehicle Class

Table 3-2
Commercial Vehicle Class: 2008

Vehicle Class*	Total	%
Commercial Truck	26,123	30.4
Public Service Vehicle (PSV) Truck	9,863	11.5
Dealer and Repairer	6,546	7.6
Taxi/Livery/Limousine	778	0.9
Public Service Vehicle (PSV) Bus	146	0.2
Commercial Trailer	42,304	49.3
Public Service Vehicle (PSV) Trailer	51	<0.1
Total Vehicles Registered	85,811	100.0

*For definition of these motor vehicle classes refer to the "Terms and Definitions" of this Section and "Glossary" of this Report.

Table 3-3 Vehicle Registration Summary

Table 3-3
Vehicle Registrations Summary: 2002 to 2008

Registration Class	2002	2003	2004	2005	2006	2007	5-year (2003- 2007) Average	2008	% Change 2007- 2008	% Change (2008 vs. 2003- 2007 average)
Non-Commercial Vehicle Class										
Passenger	469,420	476,834	483,274	487,158	491,363	499,078	487,541	509,856	2.2	4.6
Antique**	83	79	71	74	80	82	77	84	2.1	8.5
Motorcycle/Moped	6,677	7,210	7,339	7,605	8,357	9,143	7,931	10,059	10.0	26.8
Truck	112,549	113,302	114,818	115,755	117,278	120,217	116,274	123,766	3.0	6.4
Farm Truck	48,971	48,370	47,650	46,512	45,083	44,477	46,418	44,073	-0.9	-5.1
Snow Vehicle**	59	55	52	49	48	49	51	47	-3.6	-6.6
Trailer	85,986	88,375	92,396	97,684	103,840	111,630	98,785	120,891	8.3	22.4
Tractor (non-farm)	144	140	131	122	125	120	128	117	-2.8	-8.6
Subtotal	723,889	734,365	745,731	754,959	766,174	784,796	757,205	808,892	3.1	6.8
Commercial Vehicle Class										
Truck	22,798	23,130	23,520	23,833	24,305	24,987	23,955	26,123	4.5	9.1
PSV Truck	6,907	7,366	8,313	8,988	9,526	10,115	8,862	9,863	-2.5	11.3
Dealer/Repairer	7,238	6,987	6,644	6,561	6,512	6,511	6,643	6,546	0.5	-1.5
Taxi/Livery	747	735	756	764	772	769	759	778	1.1	2.4
PSV Bus**	139	135	132	135	134	143	136	146	2.4	7.8
Trailers*	32,273	30,022	33,073	33,453	37,226	38,183	34,391	42,304	10.8	23.0
PSV Trailers**	44	57	57	54	58	56	56	51	-8.5	-9.1
Subtotal	70,146	68,432	72,495	73,788	78,533	80,764	74,802	85,811	6.2	14.7
Total Registrations	794,035	802,797	818,226	828,747	844,707	865,560	832,007	894,703	3.4	7.5
Snowmobiles***										
Total	18,483	18,647	19,321	19,852	20,832	23,401	20,411	26,359	12.6	29.1
Off-Road Vehicle Dealer Plates										
Total	378	415	417	398	446	429	421	473	10.3	12.4

*Commercial trailers include semi-trailers.

**Due to small numbers, percentage change figures are expected to be somewhat erratic year-over-year and should be interpreted with extreme caution.

***Snowmobile registration count reflects the average number of active policies at a point in time during the riding season, from December to April (e.g., for 2008, December 2007 through April 2008, inclusive).

Over the previous five years (2003 to 2007), total vehicle registrations (excluding snowmobiles) have increased by an average of 1.7% each year. By way of comparison, total vehicle registrations (excluding snowmobiles) increased by 3.4% in 2008 over 2007, twice the 5-year (2003-2007) average rate of increase.

The percentage increase in Commercial vehicles (6.2%) is twice that of the percentage increase in Non-commercial vehicles (3.1%) for 2008 compared to 2007. However, as non-commercial vehicles outnumber commercial vehicles by nearly a factor of ten, the overall percentage increase of vehicle registrations for 2008 compared to 2007 is only 3.4%.

Snowmobile registrations increased by 12.6% in 2008 over 2007 and by 29.1% compared to the 5-year (2003-2007) average registrations.

SECTION 4 – Traffic Collisions





Introduction

This section counts the number of collisions in Manitoba and provides detail for collisions of different severity, fatal, injury and property damage only (PDO). Historical information regarding the number of collisions, the number of victims, the number of vehicles and the number of drivers over the ten year period 1999 to 2008 is presented. Details are provided for 2008 traffic collisions in terms of the month of occurrence, day of the week, time of day, weather and road conditions, location and type of collision.

Key Highlights

In 2008, there were 27,161 collisions involving 7,953 victims, 44,692 vehicles and 42,247 drivers. Of these:

- 85 were fatal collisions, with 92 victims killed and 66 victims injured, and involving 141 vehicles and 121 drivers;
- 5,996 were injury collisions, with 7,795 victims injured and involving 10,265 vehicles and 9,899 drivers; and,
- 21,080 were PDO collisions, involving 34,286 vehicles and 32,227 drivers.

Collisions most frequently occur:

- In Winnipeg (58% of all collisions; 20% of fatal, 65% of injury and 56% of PDO collisions) and in rural areas (25% of all collisions, 67% of fatal, 22% of injury and 25% of PDO collisions);
- In the winter months (January, February and December) – 34% of all collisions; 18% of fatal, 31% of injury and 36% of PDO collisions;
- On the weekend (all day Friday, Saturday and Sunday) – 42% of all collisions; 57% of fatal, 39% of injury and 43% of PDO collisions;
- On Fridays – 18% of all collisions; 20% of fatal, 17% of injury and 18% of PDO collisions; and
- Between the hours of 3 and 6 p.m. (15:00 to 17:59) – 23% of all collisions; 14% of fatal, 26% of injury and 22% of PDO collisions.

The majority of collisions:

- Are "motor vehicle to motor vehicle" in nature – 69% of all collisions; 37% of fatal, 66% of injury and 70% of PDO collisions; and,
- Are "rear end" collisions (36% of all collisions), collisions occurring at 90° intersections (19% of all collisions), collisions resulting from leaving the road (11% of all collisions), side-swipe collisions (10% of all collisions) and collisions associated with turning (9% of all collisions).

Major Elements Examined

Counts of collisions in Manitoba for 2008 and previous years are taken from Traffic Accident Reports (TAR) completed by law enforcement agencies and compiled by Manitoba Public Insurance. These counts are presented for all reportable collisions, for fatal collisions, for injury collisions and for property damage only (PDO) collisions.

Collisions, victims, vehicles and drivers are presented separately at the beginning of this section with historical counts provided for the years 1999 through 2008. Following that, the majority of this section explores traffic collisions occurring in 2008 and provides average counts of collisions for the time period 2003 to 2007 as a comparison to 2008 collisions.

The reader is cautioned that counts of collisions from 2003 to 2008 uses a methodology slightly different than that employed in 1999 to 2002. Counts of all collisions in 2003 to 2008 have been taken from "cleaned" data, i.e., the data was examined for consistency and accuracy and duplicate records have been removed. Counts of collisions in 1999 to 2002 had a similar cleaning process employed, but only for fatal collisions.

It is important to note that the number of collisions is not equal to the number of victims as each collision can result in multiple victims. Likewise, the number of vehicles involved is not necessarily representative of the number of drivers involved as a driverless vehicle (e.g., a parked car) could be involved in a collision.

"Drivers" in this section refers to the number of drivers involved in collisions. It excludes pedestrians, bicyclists, snowmobiles, off-road vehicles, farm and construction equipment, trains and parked vehicles.

The terms 'crash', 'collision' and 'accident' are used interchangeably in this report.

The terms 'fatal' and 'killed' are used interchangeably in this report.

The reader is cautioned that not all percentages and calculations in the following tables will add to 100% of the total noted. Rounding error will often produce a difference of one or two percentage points. Likewise, average calculations are presented for historical data from the years 2003 to 2007. Rounding error in these calculations will cause individual average counts not to add to total average counts in some cases.

The reader is cautioned when interpreting results regarding fatal collisions. Due to the small numbers of these types of collisions, fluctuations year-over-year could be dramatic; a small change in the total count of these types of collisions could have a significant effect on statistics such as percentage change to previous years and relative involvement rates.

Terms and Definitions

"Collision severity"

- A classification of a collision based on the most severe result of the collision, i.e., whether someone was killed (fatal), injured (injury) or property damage only (PDO) occurred.

"Fatal Collision"

- A motor vehicle collision in which at least one person is killed as a result of the collision. The death must have occurred within thirty days of the collision occurrence.

"Injury Collision"

- A motor vehicle collision in which at least one person has been recorded as sustaining some level of personal injury, but in which no one is fatally injured or killed. Levels of injury include: 'major' (admitted to hospital); 'minor' (treated and released from hospital); and, 'minimal' (no hospital treatment required).

"Property Damage Only (PDO) Collision"

- A motor vehicle collision in which no injury or fatality is sustained and only property damage is the result.

"Collision Type"

- Refers to the object struck by a motor vehicle during a collision (including: a pedestrian, another motor vehicle, a train, a motorcycle, a bicycle, an animal, and fixed objects) or to what happened to the vehicle in a single-vehicle collision (including: overturned on roadway and ran off roadway).

"Urban Location"

- Collisions occurring within the municipal boundaries of urban areas, including Winnipeg, Brandon, Portage la Prairie, Flin Flon, Dauphin, Thompson, The Pas, Selkirk and others.

"Rural Location"

- Collisions occurring on primary highways, secondary highways and local roadways, including the Trans Canada Highway and excluding those that occur within the municipal boundaries of an urban area.

"Accident Configuration"

- Briefly describes the action taken by a vehicle immediately prior to or at the start of the collision, including such events as rear-ending another vehicle, side-swiping another vehicle, turning into (the path of) another vehicle, parking, meeting another vehicle at an intersection and/or leaving the roadway.
- "Other" in terms of accident configuration includes, primarily, collisions involving more than one configuration or sequence of events.

Table 4-1 Ten Year Summary of Traffic Collisions

Table 4-1
Ten Year Summary of Traffic Collisions: 1999 to 2008

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2003-2007 Average
Total Collisions	28,667	30,973	30,999	31,983	34,820	35,060	33,210	31,774	29,531	27,161	32,879
Fatal	99	92	82	99	95	90	88	104	96	85	95
Injury	6,959	6,931	6,656	6,953	7,283	6,867	6,497	6,516	6,425	5,996	6,718
PDO	21,609	23,950	24,261	24,931	27,442	28,103	26,625	25,154	23,010	21,080	26,067
Total Victims	9,810	9,596	9,096	9,642	9,833	9,329	8,773	8,847	8,645	7,953	9,085
Killed	113	111	94	109	102	99	113	119	109	92	108
Injured	9,697	9,485	9,002	9,533	9,731	9,230	8,660	8,728	8,536	7,861	8,977
Total Vehicles Involved	48,457	52,810	51,123	52,829	57,379	57,341	54,433	51,689	48,560	44,692	53,880
Fatal	157	140	138	156	142	131	135	151	141	141	140
Injury	12,543	12,362	11,770	12,384	12,771	12,117	11,518	11,340	11,118	10,265	11,773
PDO	35,757	40,308	39,215	40,289	44,466	45,093	42,780	40,198	37,301	34,286	41,968
Total Drivers Involved	44,862	48,859	46,324	48,082	52,496	52,126	48,970	46,444	44,878	42,247	48,983
Fatal	151	136	127	149	138	127	126	145	135	121	134
Injury	12,096	11,943	11,377	11,957	12,267	11,674	11,069	10,853	10,715	9,899	11,316
PDO	32,615	36,780	34,820	35,976	40,091	40,325	37,775	35,446	34,028	32,227	37,533

In 2008, there were 27,161 collisions involving 7,953 victims, 44,692 vehicles and 42,247 drivers. Of these:

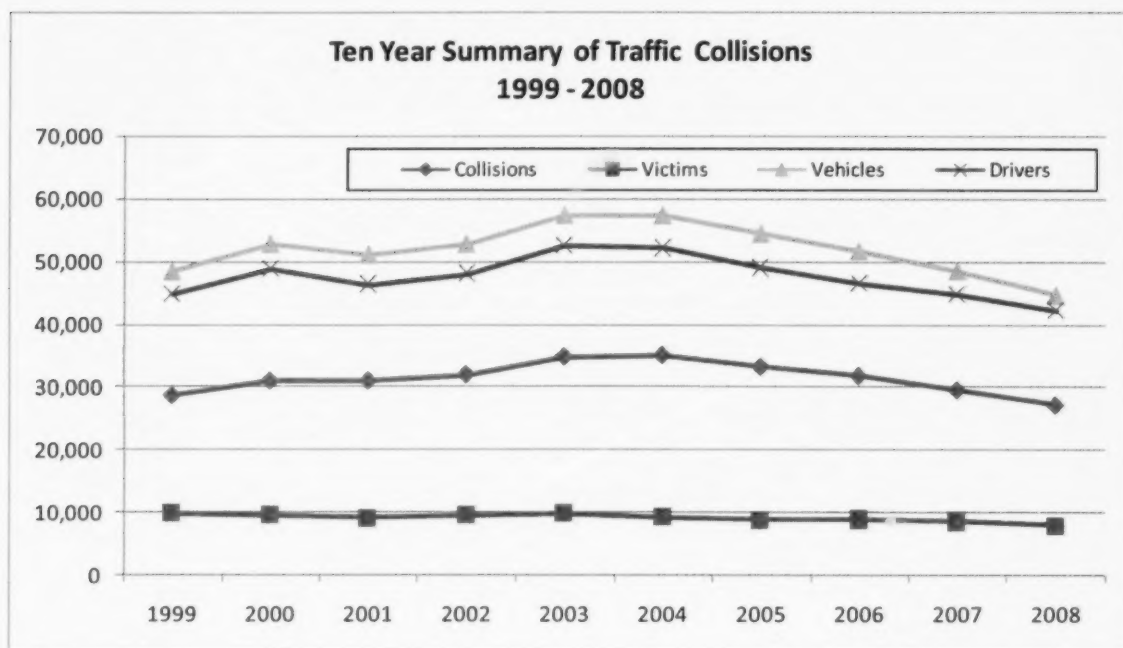
- 85 were fatal collisions, with 92 victims killed and 66 victims injured, and involving 141 vehicles and 121 drivers;
- 5,996 were injury collisions, with 7,795 victims injured and involving 10,265 vehicles and 9,899 drivers; and,
- 21,080 were PDO collisions, involving 34,286 vehicles and 32,227 drivers.

Total collisions in 2008 are 8% lower than 2007 and 17% lower than the average number of collisions in the previous five years (2003 to 2007).

- Fatal collisions declined by nearly 12% compared to 2007 and by 10% compared to the previous five year average.
- Injury collisions declined by nearly 7% compared to 2007 and by nearly 11% compared to the previous five year average.
- PDO collisions declined by 8% compared to 2007 and by 19% compared to the previous five year average.

There are 8% fewer victims in 2008 than in 2007 and nearly 13% fewer than in the previous five year average.

There are 6% fewer drivers involved in collisions in 2008 than in 2007 and nearly 14% fewer than in the previous five year average.

Figure 4-1 Ten Year Summary of Traffic Collisions

2008 represents the fourth year in a row where the total number of collisions has dropped. This steady decline is mirrored in a decline in the number of vehicles and drivers involved in collisions over the same time period. Prior to 2005, the total number of collisions had either held steady or actually experienced an increase year-over-year.

While the total number of victims involved in collisions has declined somewhat more slowly than total collisions, 2008 represents the sixth year in the last ten where a decline in the total count has been recorded compared to the previous year. The total number of victims involved in collisions in 2008 is the lowest it's been in the last ten years.

Table 4-2 Traffic Collisions by Month of Occurrence and Collision Severity

Table 4-2
Traffic Collisions by Month of Occurrence and Collision Severity: 2008, 2003-2007 Average

Month	2008 Collision Severity						2008 Total	% of 2008 Total	2003-2007 Average Count of Collisions				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
January	3	3.5%	536	8.9%	2,052	9.7%	2,591	9.5%	6	732	3,243	3,981	12.1%
February	4	4.7%	602	10.0%	2,348	11.1%	2,954	10.9%	5	573	2,408	2,986	9.1%
March	1	1.2%	485	8.1%	1,503	7.1%	1,989	7.3%	5	563	2,280	2,848	8.7%
April	8	9.4%	364	6.1%	1,161	5.5%	1,533	5.6%	5	421	1,614	2,040	6.2%
May	6	7.1%	399	6.7%	1,142	5.4%	1,547	5.7%	7	500	1,723	2,230	6.8%
June	8	9.4%	469	7.8%	1,461	6.9%	1,938	7.1%	9	560	1,960	2,528	7.7%
July	7	8.2%	411	6.9%	1,328	6.3%	1,746	6.4%	9	542	1,785	2,336	7.1%
August	7	8.2%	531	8.9%	1,395	6.6%	1,933	7.1%	12	529	1,696	2,237	6.8%
September	13	15.3%	475	7.9%	1,565	7.4%	2,053	7.6%	9	550	1,819	2,378	7.2%
October	7	8.2%	484	8.1%	1,735	8.2%	2,226	8.2%	13	592	2,197	2,802	8.5%
November	13	15.3%	546	9.1%	2,248	10.7%	2,807	10.3%	9	552	2,594	3,154	9.6%
December	8	9.4%	694	11.6%	3,142	14.9%	3,844	14.2%	6	603	2,749	3,358	10.2%
Total	85	100%	5,996	100%	21,080	100%	27,161	100%	95	6,718	26,067	32,879	100%

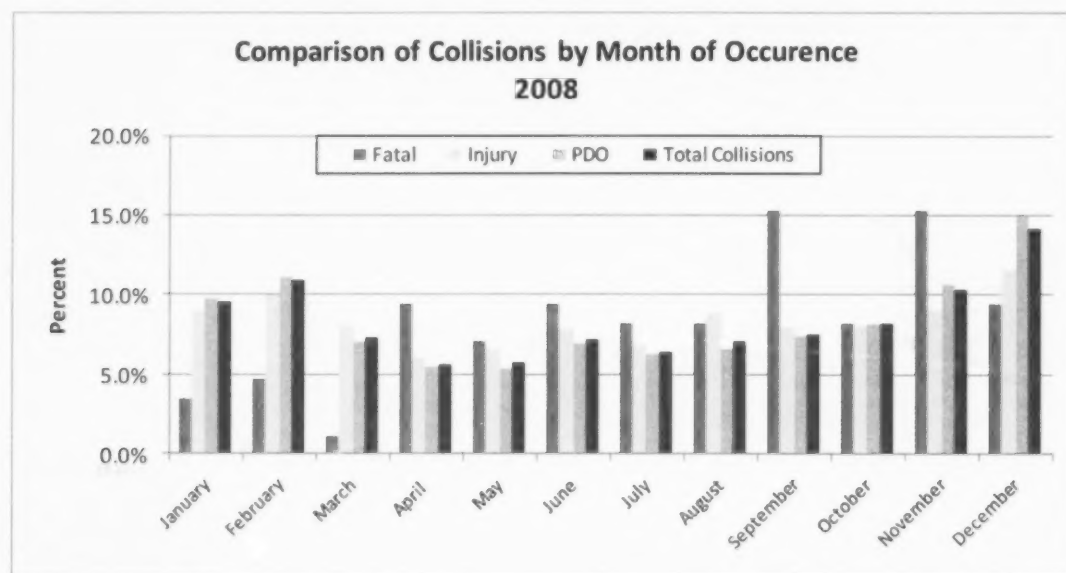
As has been the case in the past, the winter months of January, February and December accounted for a third (34%) of all collisions in Manitoba in 2008. In the previous five year period (2003-2007), these months accounted for an average of 31% of all collisions. In 2008, January, February and December, combined, account for:

- 18% of all fatal collisions;
- 31% of all injury collisions; and,
- 36% of all PDO collisions.

December 2008 was the only month to experience a proportional increase in the total number of collisions compared to the previous five year (2003 to 2007) average; the proportion of total collisions occurring in December increased by nearly 15%. Compared to the previous five year average:

- The proportion of fatal collisions occurring in December increased by 33%;
- The proportion of injury collisions occurring in December increased by 15%; and,
- The proportion of PDO collisions occurring in December increased by 14%.

Figure 4-2 Traffic Collisions by Month of Occurrence and Collision Severity



The months of September and November accounted for nearly a third (31%, a count of 13 in each month) of all fatal collisions occurring in Manitoba in 2008. The proportion of total fatal collisions occurring in each of these months is up substantially from the proportions recorded in the previous five years on average; the proportion in September increased by 41% and the proportion in November increased by 51%. The month of April also accounted for an abnormally high proportion of fatal collisions in 2008, up 74% (to a count of 8 from 5) of the average proportion for April in the previous five years. In the previous five years on average, August and October accounted for the highest proportion of fatal collisions.

In 2008, PDO collisions occurred most frequently in the months of January (10% of PDO collisions), February (11%), November (11%) and December (15%). This was also the case in the previous five year period on average.

Table 4-3 Traffic Collisions by Day of Occurrence and Collision Severity

Table 4-3
Traffic Collisions by Day of Week of Occurrence and Collision Severity: 2008, 2003-2007 Average

Day of Week	2008 Collision Severity						2008 Total	% of 2008 Total	2003-2007 Average Count of Collisions				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
Sunday	16	18.8%	595	9.9%	2,273	10.8%	2,884	10.6%	18	700	2,771	3,489	10.6%
Monday	4	4.7%	892	14.9%	2,845	13.5%	3,741	13.8%	10	965	3,563	4,539	13.8%
Tuesday	7	8.2%	929	15.5%	3,204	15.2%	4,140	15.2%	9	989	3,703	4,701	14.3%
Wednesday	14	16.5%	877	14.6%	2,936	13.9%	3,827	14.1%	10	996	3,752	4,758	14.5%
Thursday	12	14.1%	937	15.6%	3,005	14.3%	3,954	14.6%	11	1,054	3,906	4,971	15.1%
Friday	17	20.0%	1,001	16.7%	3,734	17.7%	4,752	17.5%	15	1,139	4,650	5,803	17.7%
Saturday	15	17.6%	765	12.8%	3,083	14.6%	3,863	14.2%	22	874	3,723	4,618	14.0%
Total	85	100%	5,996	100%	21,080	100%	27,161	100%	95	6,718	26,067	32,879	100%

As can be seen in Table 4-3, overall, Friday accounts for the single highest proportion of collisions in 2008; this is also the case in the previous five years (2003 to 2007) on average. Friday accounts for:

- 18% of all collisions in 2008 and in the previous five years;
- 20% of fatal collisions in 2008 and 15% in the previous five years;
- 17% of injury collisions in 2008 and in the previous five years; and,
- 18% of PDO collisions in 2008 and in the previous five years.

Weekends, defined as all day Friday, Saturday and Sunday, combined, account for:

- 42% of all collisions in 2008 and in the previous five years;
- 57% of fatal collisions in 2008 and 58% in the previous five years;
- 39% of injury collisions in 2008 and 40% in the previous five years; and,
- 43% of PDO collisions in 2008 and in the previous five years.

Historically, fatal collisions typically happen more often on Saturday and Sunday than any other day of the week. Sunday accounts for 19% of all fatal collisions in 2008 and 20% of all fatal collisions in the five year period 2003-2007 on average. Saturday accounts for 18% of all fatal collisions in 2008 and 23% of all fatal collisions in the five year period 2003-2007 on average.

Figure 4-3 Traffic Collisions by Day of Occurrence and Collision Severity

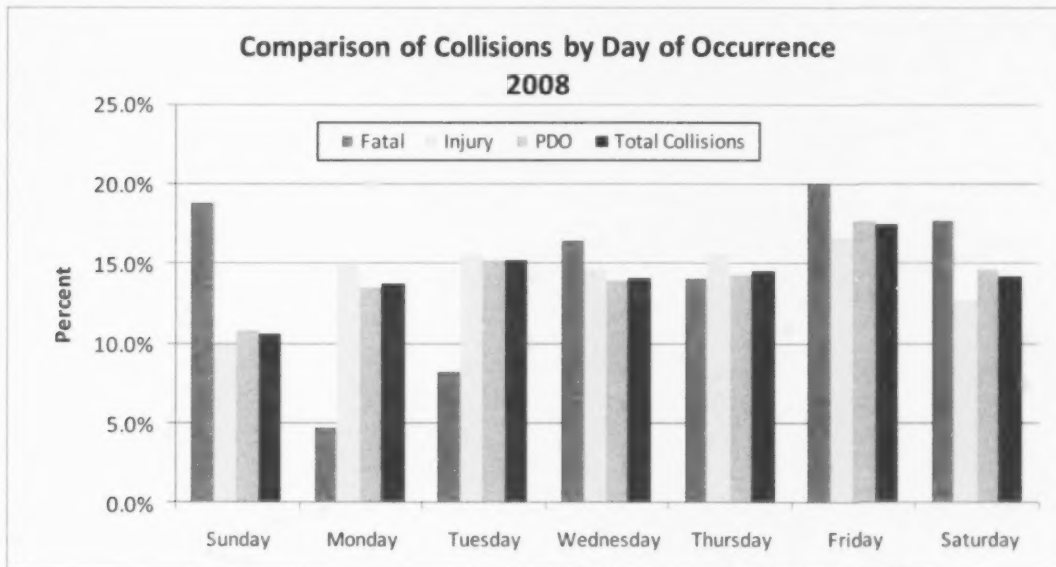


Table 4-4 Traffic Collisions by Time of Occurrence and Collision Severity

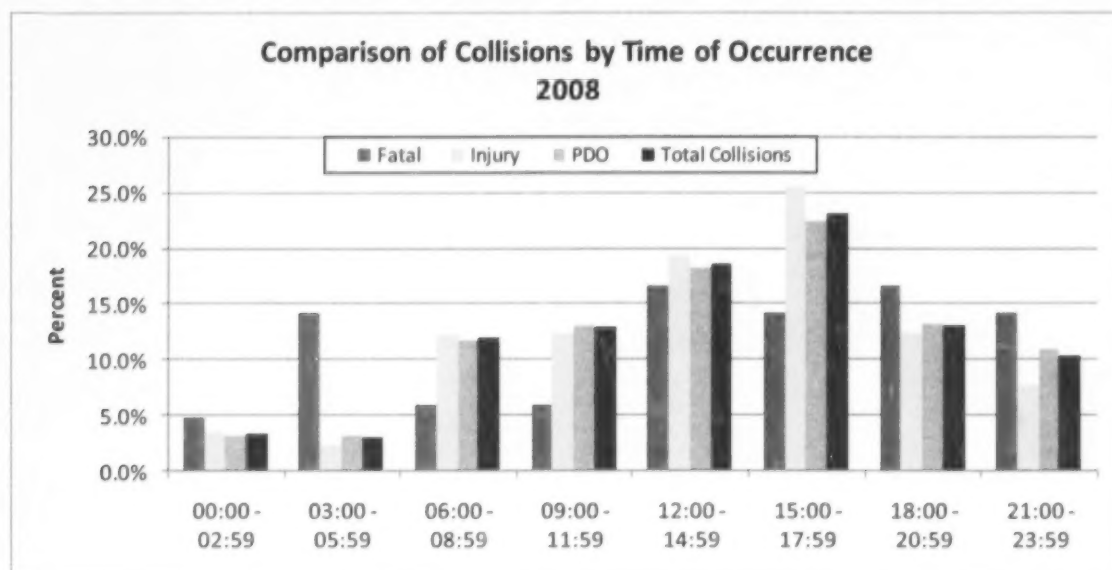
Table 4-4
Traffic Collisions by Time of Occurrence and Collision Severity: 2008, 2003-2007 Average

Time	2008 Collision Severity						2008 Total	% of 2008 Total	2003-2007 Average Count of Collisions				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
00:00 - 02:59	4	4.7%	207	3.5%	655	3.1%	866	3.2%	11	227	930	1,168	3.6%
03:00 - 05:59	12	14.1%	137	2.3%	657	3.1%	806	3.0%	9	158	659	826	2.5%
06:00 - 08:59	5	5.9%	726	12.1%	2,470	11.7%	3201	11.8%	11	763	2,612	3,386	10.3%
09:00 - 11:59	5	5.9%	740	12.3%	2,718	12.9%	3463	12.7%	9	862	3,345	4,217	12.8%
12:00 - 14:59	14	16.5%	1,156	19.3%	3,831	18.2%	5001	18.4%	11	1,287	4,814	6,112	18.6%
15:00 - 17:59	12	14.1%	1,530	25.5%	4,732	22.4%	6274	23.1%	14	1,728	5,884	7,627	23.2%
18:00 - 20:59	14	16.5%	739	12.3%	2,762	13.1%	3515	12.9%	12	840	3,656	4,507	13.7%
21:00 - 23:59	12	14.1%	453	7.6%	2,298	10.9%	2763	10.2%	11	547	2,895	3,453	10.5%
Not Stated	7	8.2%	308	5.1%	957	4.5%	1272	4.7%	7	305	1,271	1,583	4.8%
Total	85	100%	5,996	100%	21,080	100%	27,161	100%	95	6,718	26,067	32,879	100%

As can be seen in Table 4-4, the largest proportion of total traffic collisions in 2008 occurred between 3 and 6 p.m., what many consider to be the afternoon rush. Nearly a quarter (23%) of all collisions occurred during these hours (14% of fatal collisions, 26% of injury collisions and 22% of PDO collisions). This is consistent with the portion of collisions occurring during these hours in the previous five years (2003 to 2007) on average.

Four in ten collisions in 2008 occurred between noon and 6 p.m. (42% of all collisions, 31% of fatal collisions, 45% of injury collisions and 41% of PDO collisions). Again, this is consistent with the portion of collisions occurring during these hours in the previous five years (2003 to 2007) on average.

Figure 4-4 Traffic Collisions by Time of Occurrence and Collision Severity



A disproportionate number of fatal collisions occurred in 2008 between the hours of 3 and 6 a.m.; 14% of all fatal collisions compared to only 3% of all collisions overall. The proportion of fatal collisions occurring between 3 and 6 a.m. is nearly equal to the portion of fatal collisions occurring in each three hour block beginning at noon and ending at midnight, the time when most collisions, regardless of severity, occur.

Table 4-5 Traffic Collisions by Provincial Location and Collision Severity

Table 4-5
Traffic Collisions by Provincial Location and Collision Severity: 2008, 2003-2007 Average

Location	2008 Collision Severity						2008 Total	% of 2008 Total	2003-2007 Average Count of Collisions				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
Winnipeg	17	20.0%	3,904	65.1%	11,807	56.0%	15,728	57.9%	19	4,513	14,262	18,794	57.2%
Brandon	1	1.2%	208	3.5%	1,013	4.8%	1,222	4.5%	1	222	1,264	1,486	4.5%
Portage	1	1.2%	42	0.7%	271	1.3%	314	1.2%	<1	60	388	448	1.4%
Flin Flon	0	-	13	0.2%	107	0.5%	120	0.4%	<1	12	156	168	0.5%
Dauphin	1	1.2%	29	0.5%	119	0.6%	149	0.5%	<1	32	210	243	0.7%
Thompson	0	-	25	0.4%	263	1.2%	288	1.1%	<1	32	358	390	1.2%
The Pas	0	-	19	0.3%	116	0.6%	135	0.5%	<1	16	200	216	0.7%
Selkirk	0	-	40	0.7%	182	0.9%	222	0.8%	<1	37	276	313	1.0%
Other Urban	8	9.4%	380	6.3%	1,954	9.3%	2,342	8.6%	7	433	3,108	3,549	10.8%
All Rural	57	67.1%	1,336	22.3%	5,248	24.9%	6,641	24.5%	66	1,361	5,844	7,271	22.1%
Total	85	100%	5,996	100%	21,080	100%	27,161	100%	95	6,718	26,067	32,879	100%

As can be seen in Table 4-5, urban areas account for three-quarters (76%) of all collisions in Manitoba, but only a third (33%) of all fatal collisions in 2008 (78% of injury collisions and 75% of PDO collisions). Rural areas account for a quarter (25%) of all collisions, but two-thirds (67%) of all fatal collisions. This is consistent with historical figures. In the previous five year period (2003 to 2007), urban areas accounted for an average of 78% of all collisions, 30% of fatal collisions, 80% of injury collisions and 78% of PDO collisions.

Nearly six in ten (58%) of all traffic collisions in 2008 occurred in Winnipeg while other urban areas accounted for 18% of all collisions. In the previous five year period (2003 to 2007) on average, Winnipeg accounted for 57% of all collisions and other urban areas accounted for 21% of all collisions.

This pattern holds when we consider both injury and PDO collisions.

- In 2008, 65% of injury collisions occurred in Winnipeg, 13% occurred in other urban areas and 22% occurred in rural areas.
- In 2008, 56% of PDO collisions occurred in Winnipeg, 19% occurred in other urban areas and 25% occurred in rural areas.

Fatal traffic collisions represent a marked departure from this overall distribution. In 2008, two-thirds (67%) of fatal collisions occur in rural areas, while only 20% occur in Winnipeg and 13% occur in other urban areas. This is consistent with the previous five year period (2003 to 2007) on average, when 70% of fatal collisions occurred in Rural areas, 20% occurred in Winnipeg and 9% occurred in other urban areas.

As can be seen in Table 4-6, "motor vehicle to motor vehicle" collisions account for the majority of collisions in Manitoba, both in 2008 and in the previous five years (2003 to 2007) on average. In 2008:

- 69% of all collisions are motor vehicle to motor vehicle;
- 37% of fatal collisions are motor vehicle to motor vehicle;
- 66% of injury collisions are motor vehicle to motor vehicle; and,
- 70% of PDO collisions are motor vehicle to motor vehicle.

Collisions occurring in urban areas are predominantly "motor vehicle to motor vehicle" in nature. In urban areas in 2008:

- 86% of all collisions are motor vehicle to motor vehicle;
- 36% of fatal collisions are motor vehicle to motor vehicle;
- 78% of injury collisions are motor vehicle to motor vehicle; and,
- 88% of PDO collisions are motor vehicle to motor vehicle.

Collisions occurring in rural areas are predominantly "motor vehicle to animal" in nature. "Ran off roadway" accounted for the second highest number of collisions in rural areas. In rural areas in 2008:

- 45% of all collisions are motor vehicle to animal (11% of injury collisions; 54% of PDO collisions); and,
- 23% of all collisions are a result of running off the road (25% of fatal collision; 36% of injury collisions; 20% of PDO collisions).

There were no fatal collisions in Manitoba in 2008 involving a collision with an animal.

Collisions with pedestrians (only accounting for 2% of all collisions in 2008) account for a very high proportion of fatal collisions in Manitoba; 18% of all fatal collisions in the province were "motor vehicle to pedestrian". In urban areas, an equal number of fatal collisions (36% of all fatal collisions in urban areas) were the result of "motor vehicle to pedestrian" and "motor vehicle to motor vehicle" collisions. In 2008, nearly 4% of "motor vehicle to pedestrian" collisions resulted in a fatality while 96% resulted in an injury.

Table 4-6 Collision Type by Urban/Rural Location

Table 4-6
Collision Type by Urban/Rural Location: 2008, 2003-2007 Average

Collision Type	Location													2003-2007 Average Count of Total Collisions				
	2008 Urban				2008 Rural				2008 Provincial Total				2008 Provincial Total as % of Total					
	Fatal	Injury	PDO	Total	Fatal	Injury	PDO	Total	Fatal	Injury	PDO	Total		Fatal	Injury	PDO	Total	% of Total
Collision with pedestrian	10	402	2	414	5	7	0	12	15	409	2	426	1.6%	13	447	9	469	1.4%
Collision with other motor vehicle	10	3,633	13,980	17,623	21	334	672	1,027	31	3,967	14,652	18,650	68.7%	35	4,548	18,505	23,088	70.2%
Collisions with train	1	2	4	7	0	1	2	3	1	3	6	10	<0.1%	2	7	10	18	<0.1%
Collision with motorcycle	1	80	43	124	3	38	7	48	4	118	50	172	0.6%	2	82	35	118	0.4%
Collision with animal drawn vehicle	0	0	0	0	0	0	1	1	0	0	1	1	<0.1%	1	41	21	63	0.2%
Collision with bicycle	0	233	21	254	2	4	0	6	2	237	21	260	1.0%	2	288	25	316	1.0%
Collision with animal	0	14	237	251	0	144	2,845	2,989	0	158	3,082	3,240	11.9%	<1	171	3,641	3,813	11.6%
Collision with fixed object	2	185	1,107	1,294	3	64	218	285	5	249	1,325	1,579	5.8%	4	292	1,901	2,197	6.7%
Collision with other object	3	29	192	224	4	29	153	186	7	58	345	410	1.5%	3	60	373	436	1.3%
Overtaken in roadway	0	14	20	34	4	234	244	482	4	248	264	516	1.9%	7	104	127	238	0.7%
Ran off roadway	1	67	206	274	14	477	1,031	1,522	15	544	1,237	1,796	6.6%	25	683	1,306	2,013	6.1%
Other non-collision	0	1	20	21	1	4	75	80	1	5	95	101	0.4%	0	12	121	133	0.4%
Total	28	4,660	15,832	20,520	57	1,336	5,248	6,641	85	5,996	21,080	27,161	100%	95	6,718	26,067	32,879	100%

Table 4-7 Traffic Collisions by Road Surface Condition and Collision Severity

Table 4-7
Traffic Collisions by Road Surface Condition and Collision Severity: 2008, 2003-2007 Average

Road Surface Condition	2008 Collision Severity						2008 Total	% of 2008 Total	2003-2007 Average Count of Collisions				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
Dry	63	74.1%	3,478	58.0%	11,319	53.7%	14,860	54.7%	63	3,834	13,987	17,883	54.4%
Wet	4	4.7%	590	9.8%	1,716	8.1%	2,310	8.5%	10	804	2,434	3,247	9.9%
Mud	0	-	8	0.1%	35	0.2%	43	0.2%	<1	9	62	71	0.2%
Snow	7	8.2%	446	7.4%	2,020	9.6%	2,473	9.1%	6	516	2,736	3,258	9.9%
Ice	5	5.9%	1,150	19.2%	4,701	22.3%	5,856	21.6%	10	1,148	4,977	6,135	18.7%
Slush	1	1.2%	71	1.2%	228	1.1%	300	1.1%	1	109	338	448	1.4%
Loose Sand/Gravel/Dirt	4	4.7%	92	1.5%	176	0.8%	272	1.0%	3	98	223	324	1.0%
Fresh Oil	0	-	2	<0.1%	2	<0.1%	4	<0.1%	-	1	3	4	<0.1%
Other	0	-	1	<0.1%	0	-	1	<0.1%	<1	1	1	2	<0.1%
Not Applicable	1	1.2%	152	2.5%	859	4.1%	1,012	3.7%	2	196	1,295	1,493	4.5%
Unknown	0	-	6	0.1%	24	0.1%	30	0.1%	-	1	12	13	<0.1%
Total	85	100%	5,996	100%	21,080	100%	27,161	100%	95	6,718	26,067	32,879	100%

As can be seen in Table 4-7, most collisions in Manitoba occur under "dry" road conditions. More than half (55%) of all collisions in 2008 and 54% of all collisions in the previous five year period (2003 to 2007) on average occurred on "dry" roads.

In 2008, three-quarters of fatal collisions occur on dry roads. In the five year period 2003 to 2007 on average, two-thirds (67%) of fatal collisions occurred on "dry" roads.

Icy road conditions account for 22% of all collisions in 2008, including 6% of fatal collisions, 20% of injury collisions and 22% of PDO collisions. This was slightly ahead of the proportion of collisions occurring on icy roads in the five year period 2003 to 2007 on average (19% of all collisions, 10% of fatal collisions, 17% of injury collisions and 19% of PDO collisions).

"Snow" and "wet" account for fairly equal proportions of collisions in 2008, at about 9% of all collisions, each.

Figure 4-5 Traffic Collisions by Road Surface Condition and Collision Severity

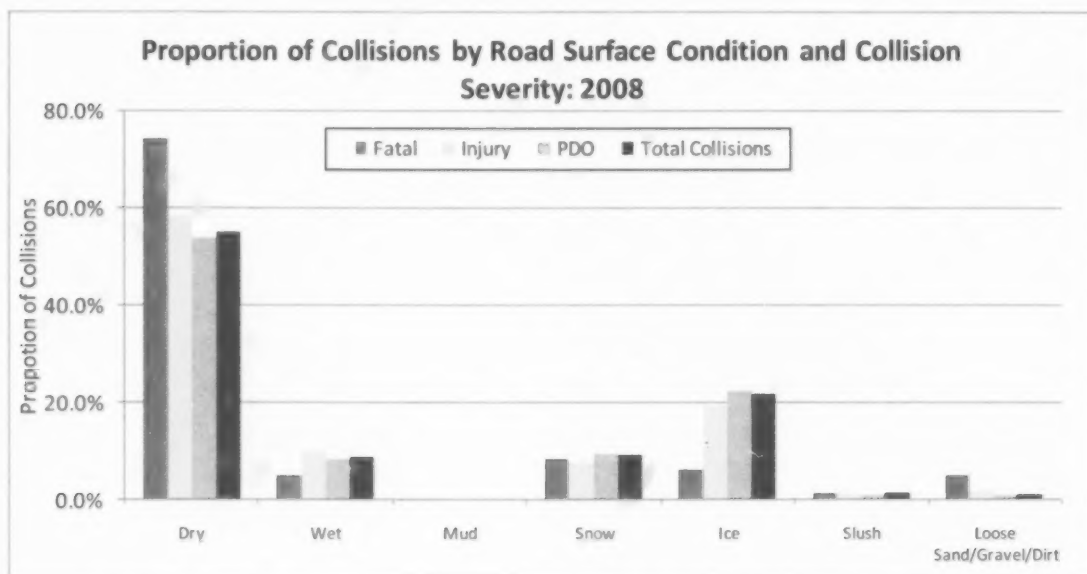


Table 4-8 Traffic Collisions by Weather Condition and Collision Severity

Table 4-8
Traffic Collisions by Weather Condition and Collision Severity: 2008, 2003-2007 Average

Weather Condition	2008 Collision Severity						2008 Total	% of 2008 Total	2003-2007 Average Count of Collisions				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
Clear	70	82.4%	4,120	68.7%	14,426	68.4%	18,616	68.5%	56	4,469	17,257	21,782	66.2%
Cloudy	5	5.9%	922	15.4%	3,001	14.2%	3,928	14.5%	22	1,146	4,204	5,372	16.3%
Raining	2	2.4%	282	4.7%	839	4.0%	1,123	4.1%	5	350	1,079	1,434	4.4%
Snowing	5	5.9%	263	4.4%	1,085	5.1%	1,353	5.0%	4	343	1,468	1,816	5.5%
Fog or Mist	0	-	35	0.6%	120	0.6%	155	0.6%	2	64	282	348	1.1%
Smoke or Dust	0	-	5	<0.1%	6	<0.1%	11	<0.1%	-	4	10	15	<0.1%
Freezing Rain/Sleet/Hail	1	1.2%	55	0.9%	178	0.8%	234	0.9%	1	34	103	137	0.4%
Drifting Snow	0	-	71	1.2%	253	1.2%	324	1.2%	2	55	168	225	0.7%
Strong Winds	1	1.2%	67	1.1%	170	0.8%	238	0.9%	1	41	112	154	0.5%
Other	0	-	1	<0.1%	2	<0.1%	3	<0.1%	-	<1	<1	1	<0.1%
Not Applicable	1	1.2%	155	2.6%	932	4.4%	1,088	4.0%	2	205	1,357	1,565	4.8%
Unknown	0	-	20	0.3%	68	0.3%	88	0.3%	-	4	27	31	<0.1%
Total	85	100%	5,996	100%	21,080	100%	27,161	100%	95	6,718	26,067	32,879	100%

As can be seen in Table 4-8, most collisions in Manitoba occur during "clear" weather conditions. Nearly seven in ten (69%) of all collisions in 2008 and 66% of all collisions in the previous five year period (2003 to 2007) on average occurred in "clear" weather. In 2008:

- "Cloudy" conditions account for 15% of all collisions, 6% of fatal collisions, 15% of injury collisions, and, 14% of PDO collisions;
- "Snowing" account for 5% of all collisions, 6% of fatal collisions, 4% of injury collisions, and, 5% of PDO collisions; and,
- "Raining" account for 4% of all collisions, 2% of fatal collisions, 5% of injury collisions, and, 4% of PDO collisions.

Figure 4-6 Traffic Collisions by Weather Condition and Collision Severity

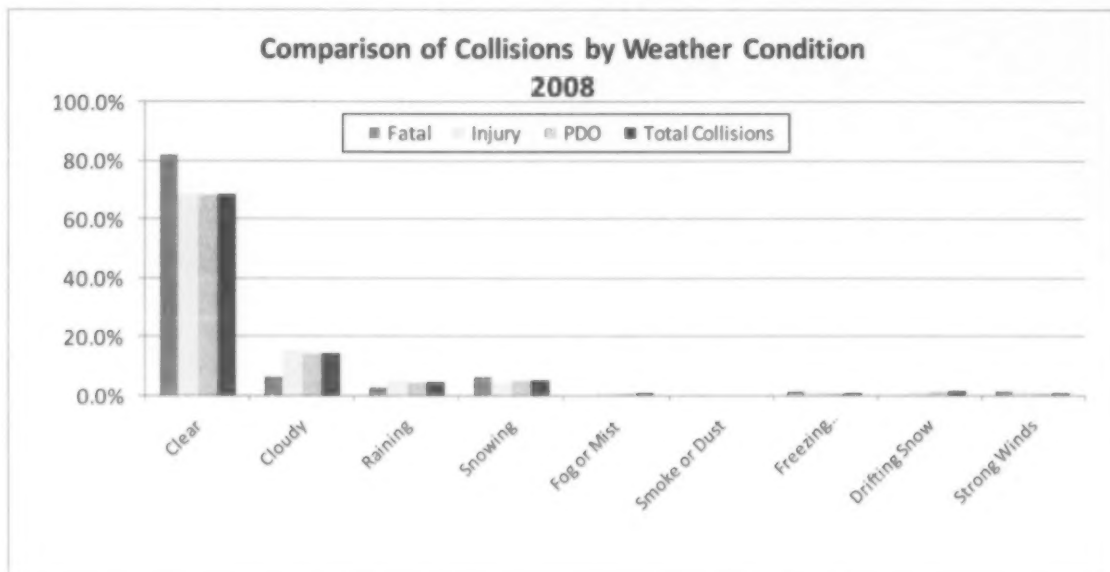


Table 4-9 Accident Configuration and Collision Severity

Table 4-9
Accident Configuration and Collision Severity: 2008, 2003-2007 Average

Accident Configuration	2008 Collision Severity						2008 Total	% of 2008 Total	2003-2007 Average Count of Collisions				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
Rear End	8	9.4%	1,733	28.9%	4,659	22.1%	6,400	23.6%	4	2,035	4,829	6,868	20.9%
Head On	14	16.5%	84	1.4%	192	0.9%	290	1.1%	12	87	248	347	1.1%
Side Swipe Opposing	2	2.4%	53	0.9%	254	1.2%	309	1.1%	1	60	351	413	1.3%
Side Swipe Same Direction	1	1.2%	117	2.0%	1,256	6.0%	1,374	5.1%	1	149	1,451	1,601	4.9%
Overtaking	2	2.4%	64	1.1%	382	1.8%	448	1.6%	<1	74	436	511	1.6%
Right Turn - Same direction	0	-	32	0.5%	113	0.5%	145	0.5%	<1	32	131	163	0.5%
Right Turn - Opposing	0	-	19	0.3%	71	0.3%	90	0.3%	<1	19	87	106	0.3%
Left Turn - Opposing	0	-	57	1.0%	160	0.8%	217	0.8%	<1	70	190	261	0.8%
Left Turn - Same direction	0	-	25	0.4%	163	0.8%	188	0.7%	<1	37	184	222	0.7%
Left Turn - Across	2	2.4%	298	5.0%	733	3.5%	1,033	3.8%	<1	355	842	1,197	3.6%
Intersection 90 degrees	8	9.4%	984	16.4%	2,304	10.9%	3,296	12.1%	15	1,166	2,837	4,018	12.2%
Off Road Right	9	10.6%	358	6.0%	718	3.4%	1,085	4.0%	14	360	739	1,114	3.4%
Off Road Left	13	15.3%	287	4.8%	479	2.3%	779	2.9%	14	282	474	770	2.3%
Fixed Object	2	2.4%	154	2.6%	830	3.9%	986	3.6%	3	191	1,298	1,492	4.5%
Parking	1	1.2%	15	0.3%	684	3.2%	700	2.6%	<1	32	1,949	1,982	6.0%
Pedestrian	11	12.9%	384	6.4%	3	<0.1%	398	1.5%	11	407	11	429	1.3%
Other	12	14.1%	1,332	22.2%	8,079	38.3%	9,423	34.7%	18	1,361	10,007	11,386	34.6%
Total	85	100%	5,996	100%	21,080	100%	27,161	100%	95	6,718	26,067	32,879	100%

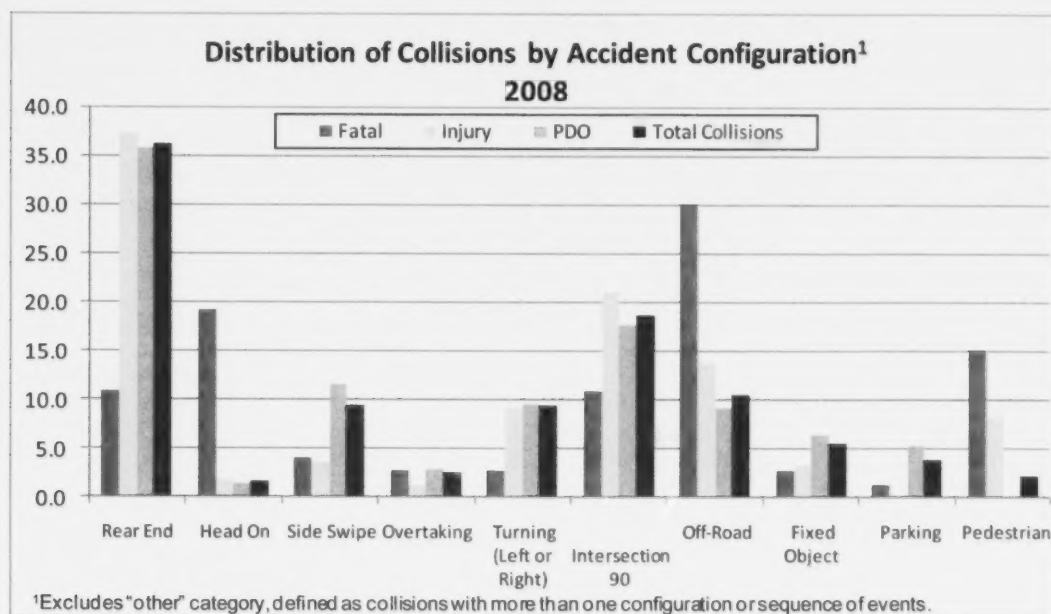
Note: "Other" accident configurations consist primarily of collisions involving more than one configuration or sequence of events.

The most common accident configuration (or sequence of events immediately prior to or at the start of a collision) for collisions occurring in Manitoba in 2008 (excluding "other") is a "rear end" type. "Rear end" accidents account for 36% of all collisions in 2008 (11% of fatal collisions; 37% of injury collisions; 36% of PDO collisions).

Following "rear end" collisions, the next most common accident configurations in 2008 (excluding "other") are:

- Collisions occurring at "90° intersections" – 19% of all collisions, 11% of fatal collisions, 21% of injury collisions and 18% of PDO collisions;
- "Leaving the road", either to the left or the right – 11% of all collisions, 30% of fatal collisions, 14% of injury collisions, 9% of PDO collisions;
- "Side-swipe collisions", including in the same or opposing direction – 10% of all collisions, 4% of fatal collisions, 4% of injury collisions, 12% of PDO collisions; and,
- "Turning", either left or right and including in the same or opposing direction – 9% of all collisions, 3% of fatal collisions, 9% of injury collisions, 10% of PDO collisions.

Figure 4-7 Distribution of Collisions by Accident Configuration and Collision Severity



Leaving the road (i.e., "Off-road") resulted in the highest proportion of fatal collisions (30%) in 2008.

Other collision configurations with a high proportion of fatal collisions include:

- "Head-on" collisions – 19% of all fatal collisions;
- "Pedestrian" collisions – 15% of all fatal collisions;
- "Rear-end" collisions – 11% of all fatal collisions; and,
- Collisions occurring at "90° intersections" – 11% of all fatal collisions.

Injuries were most likely to occur in "rear-end" collisions (37% of all injury collisions), collisions occurring at "90° intersections" (21%), "leaving the road" (14%), "turning" (9%) or collisions with "pedestrians" (8%).



SECTION 5 – Collision Victims





Introduction

This section calculates the number of victims killed and injured in traffic collisions and examines the severity of the injury received by the victim. Month, time and day of occurrences are examined, as well as the age of the victim. Specific contributing factors to the collision are also presented for each victim. Relative involvement of victims in traffic collisions per 100,000 people in the general population is also calculated.

Key Highlights

In 2008, there were 7,953 victims (or casualties) involved in traffic collisions. Of these:

- 92 were killed;
- 397 were seriously injured;
- 2,979 sustained minor injuries;
- 3,691 sustained minimal injuries; and
- 794 sustained injuries that are undefined in terms of severity.

The relative involvement (per 100,000 people in the general population) of casualties in traffic collisions in 2008 (663.3) has decreased by 9% compared to 2007 and by 14% compared to the previous five years (2003 to 2007) on average. Casualty involvement rates in traffic collisions in 2008 where the victim:

- Was killed (7.7 in 2008) has decreased by nearly 17% compared to 2007 and to the previous five years on average; and,
- Was injured, including all levels of severity but excluding killed (655.6 in 2008), has decreased by 9% compared to 2007 and by 14% compared to the previous five years on average.

Victims aged 25 to 34 account for the highest proportion of casualties in 2008 (18% of all casualties), closely followed by those aged 35 to 44 (17% of all casualties) and 45 to 54 (16% of all casualties).

While women account for just over half of all casualties in traffic collisions (53%), men account for a higher proportion of fatalities (nearly 71%) and serious injuries (58%).

"Drivers" account for 66% of all casualties and motor vehicle "Passengers" for 24%. "Pedestrians" (nearly 6% of all casualties) and "Bicyclists" (3%) are the next largest "Road User Class" victim groups.

Casualties in traffic collisions most frequently result from crashes occurring:

- In Winnipeg – 63% of all victims;
- In the late fall and winter months (including November through February) – 39% of all victims; 32% of victims killed and 40% of victims injured;
- On Thursday (nearly 16% of all victims) or Friday (16% of all victims); and,
- Between noon and 6 p.m. (12:00-14:59 – 19% of all victims; 15:00 to 17:59 – 25% of all victims).

Major Elements Examined

Counts of collisions in Manitoba for 2008 and previous years are taken from Traffic Accident Reports (TAR) completed by law enforcement agencies and compiled by Manitoba Public Insurance.

It is important to note that the number of victims involved in traffic collisions is not equal to the number of collisions that occurred as each collision can result in multiple victims while some collisions result in property damage only (PDO). PDO collisions are not included in this section.

The terms 'crash', 'collision' and 'accident' are used interchangeably in this report. As well, the terms 'victim' and 'casualty', and the terms 'fatal' and 'killed' are used interchangeably in this report.

The reader is cautioned when interpreting results regarding casualty collisions by injury severity, including fatalities. Due to the small numbers in some of these types of collisions, fluctuations year-over-year could be dramatic; for example, a small change in the total count of fatal collisions could have a significant effect on statistics such as percentage change to previous years and relative involvement rates.

The reader is cautioned that not all percentages and calculations in the following tables will add to 100% of the total noted. Rounding error will often produce a difference of one or two percentage points. Likewise, average calculations are presented for historical data from the years 2003 to 2007. Rounding error in these calculations will cause individual average counts not to add to total average counts in some cases.

Terms and Definitions

"Casualty Type"

- A classification of the severity of the injury sustained by a victim in a traffic collision, i.e., whether someone was killed or injured. This classification also includes a designation for the severity of each non-fatal injury sustained (i.e., victims sustaining a serious/major, minor or minimal injury).

"Killed"

- The casualty type "killed" indicates where the victim involved in the traffic collision died as a result of their injuries within thirty days of the collision occurrence.

"Injured"

- The casualty type "injured" indicates where the victim sustained some level of personal injury, but in which they were not killed. Levels of injury include: 'serious' or 'major' (admitted to hospital); 'minor' (treated and released from hospital); and, 'minimal' (no hospital treatment required). 'Other' injury is noted when the severity of the victim's injuries is not known or recorded in the TAR.

"Road User Class"

- A classification based on how a person involved in a collision was using the road at the time of the collision. It includes: Drivers (of motor vehicles), Passengers (in motor vehicles), those Riding/Hanging On (to a motor vehicle), Motorcyclist (drivers and passengers), Moped (drivers and passengers), Bicyclist (drivers and passengers), and Pedestrians.

"Vehicle Occupant"

- All those in the "Road User Class" of "Drivers" and "Passengers". It excludes "Motorcyclist", "Bicyclist", "Moped", those "Riding/Hanging On" to a vehicle and "Pedestrians".

"Casualty Involvement Rate"

- A calculation of the number of victims or casualties involved in traffic collisions for every 100,000 people in the general population in Manitoba. Population statistics are taken from the Provincial government and can be found at the following web address:
<http://www.gov.mb.ca/health/annstats/index.html>

"Collision Type"

- Refers to the object struck by a motor vehicle during a collision (including: a pedestrian, another motor vehicle, a train, a motorcycle, a bicycle, an animal, and fixed objects) or to what happened to the vehicle in a single-vehicle collision (including: overturned on roadway and ran off roadway).

"Accident Configuration"

- Briefly describes the action taken by a vehicle immediately prior to or at the start of the collision, including such events as rear-ending another vehicle, side-swiping another vehicle, turning into (the path of) another vehicle, parking, meeting another vehicle at an intersection and/or leaving the roadway.
- "Other" in terms of accident configuration includes, primarily, collisions involving more than one configuration or sequence of events.

Table 5-1 Ten Year Summary of Victims in Traffic Collisions

Table 5-1
Ten Year Summary of Victims in Traffic Collisions: 1999 to 2008

Year	Casualty Type												Total Victims	% change to previous year
	Killed	% change to previous year	Serious Injury	% change to previous year	Minor Injury	% change to previous year	Minimal Injury	% change to previous year	Other Injury	% change to previous year	Total Injured	% change to previous year		
1999	113	-	-	-	-	-	-	-	-	-	9,697	-	9,810	-
2000	111	-1.8%	-	-	-	-	-	-	-	-	9,485	-2.2%	9,596	-2.2%
2001	94	-15.3%	-	-	-	-	-	-	-	-	9,002	-5.1%	9,096	-5.2%
2002	109	16.0%	-	-	-	-	-	-	-	-	9,533	5.9%	9,642	6.0%
2003	102	-6.4%	499	-	3,835	-	4,724	-	673	-	9,731	2.1%	9,833	2.0%
2004	99	-2.9%	483	-3.2%	3,743	-2.4%	4,314	-8.7%	690	2.5%	9,230	-5.1%	9,329	-5.1%
2005	113	14.1%	421	-12.8%	3,354	-10.4%	3,935	-8.8%	950	37.7%	8,660	-6.2%	8,773	-6.0%
2006	119	5.3%	485	15.2%	3,464	3.3%	3,959	0.6%	820	-13.7%	8,728	0.8%	8,847	0.8%
2007	109	-8.4%	427	-12.0%	3,203	-7.5%	4,000	1.0%	906	10.5%	8,536	-2.2%	8,645	-2.3%
2008	92	-15.6%	397	-7.0%	2,979	-7.0%	3,691	-7.7%	794	-12.4%	7,861	-7.9%	7,953	-8.0%
2003-2007 Average*	108	0.3%	463	-3.2%	3,520	-4.3%	4,186	-4.0%	808	9.3%	8,977	-2.1%	9,085	-2.1%

*The "% change to previous year" for "2003-2007 Average" is an average rate of change for the time period 2003 to 2007.

NOTE: A change in the methodology of how injury severity is reported has been implemented beginning in 2008. Historical figures were calculated for the years 2003 to 2007 for comparison purposes, but not for years prior to that time.

In 2008, there were 7,953 victims (or casualties) involved in traffic collisions. Of these:

- 92 were killed;
- 397 were seriously injured;
- 2,979 sustained minor injuries;
- 3,691 sustained minimal injuries; and
- 794 sustained injuries that are undefined in terms of severity.

Overall, there are 8% fewer victims in traffic collisions in 2008 than there were in 2007. This decrease is nearly four times the rate of decrease in total traffic collision casualties recorded for the previous five year period (2003 to 2007) on average (just over a 2% decrease each year). Compared to the previous five years, in 2008:

- Total casualties are down nearly 13%;
- The number of victims killed is down 15%;
- The number of victims seriously injured is down 14%;
- The number of victims sustaining minor injuries is down 15%;
- The number of victims sustaining minimal injuries is down 12%; and ,
- The number of victims sustaining "other" injuries is down 2%.

Recognizing that counts of victims involved in collisions could be impacted either positively or negatively by changing population statistics, relative involvement rates per 100,000 people in the general population in Manitoba is examined (see Table 5-2) to provide a standardized rate comparison. This accounts for changing population size instead of simply a raw count of the number of victims involved overall.

Table 5-2 Ten Year Summary of Victim Involvement Rate (per 100,000 People) in Traffic Collisions

Table 5-2
 Ten Year Summary of Victim Involvement Rate (per 100,000 People) in Traffic Collisions: 1999 to 2008

Year	Casualty Type												Total Victims	% change to previous year
	Killed	% change to previous year	Serious Injury	% change to previous year	Minor Injury	% change to previous year	Minimal Injury	% change to previous year	Other Injury	% change to previous year	Total Injured	% change to previous year		
1999	9.9	-	-	-	-	-	-	-	-	-	847.3	-	857.2	-
2000	9.7	-2.2%	-	-	-	-	-	-	-	-	824.9	-2.7%	834.5	-2.6%
2001	8.1	-15.8%	-	-	-	-	-	-	-	-	778.6	-5.6%	786.7	-5.7%
2002	9.4	16.0%	-	-	-	-	-	-	-	-	824.5	5.9%	833.9	6.0%
2003	8.8	-6.7%	43.0	-	330.7	-	407.3	-	58.0	-	839.0	1.8%	847.8	1.7%
2004	8.5	-3.8%	41.3	-4.0%	320.0	-3.2%	368.8	-9.5%	59.0	1.7%	789.1	-5.9%	797.6	-5.9%
2005	9.6	13.7%	35.9	-13.1%	285.7	-10.7%	335.2	-9.1%	80.9	37.2%	737.8	-6.5%	747.4	-6.3%
2006	10.1	4.9%	41.2	14.7%	293.9	2.9%	335.9	0.2%	69.6	-14.0%	740.6	0.4%	750.7	0.4%
2007	9.2	-9.0%	36.0	-12.5%	270.0	-8.2%	337.2	0.4%	76.4	9.7%	719.5	-2.9%	728.7	-2.9%
2008	7.7	-16.5%	33.1	-8.0%	248.5	-8.0%	307.8	-8.7%	66.2	-13.3%	655.6	-8.9%	663.3	-9.0%
2003-2007 Average*	9.2	-0.2%	39.5	-3.7%	300.1	-4.8%	356.9	-4.5%	68.8	8.6%	765.2	-2.6%	774.4	-2.6%

*The "% change to previous year" for "2003-2007 Average" is an average rate of change for the time period 2003 to 2007.

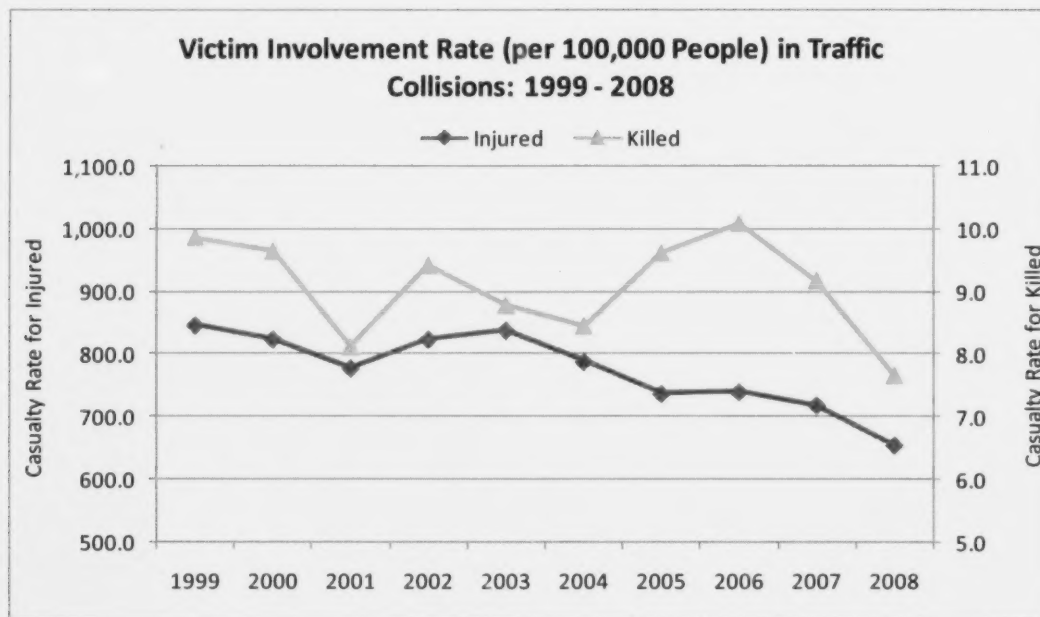
NOTE: A change in the methodology of how injury severity is reported has been implemented beginning in 2008. Historical figures were calculated for the years 2003 to 2007 for comparison purposes, but not for years prior to that time.

In 2008, the relative involvement of victims (per 100,000 people in the general population) in traffic collisions (663.3) has decreased by 9% compared to 2007 and by 14% compared to the previous five years (2003 to 2007) on average.

The victim involvement rate in traffic collisions in 2008 where the victim:

- Was killed (7.7 in 2008) has decreased by nearly 17% compared to 2007 and to the previous five years on average;
- Was injured (655.6 in 2008) has decreased by 9% compared to 2007 and by 14% compared to the previous five years on average;
- Was seriously injured (33.1 in 2008) has decreased by 8% compared to 2007 and by 16% compared to the previous five years on average;
- Sustained minor injuries (248.5 in 2008) has decreased by 8% compared to 2007 and by 17% compared to the previous five years on average; and,
- Sustained minimal injuries (307.8 in 2008) has decreased by nearly 9% compared to 2007 and by nearly 14% compared to the previous five years on average.

Figure 5-1 Ten Year Summary of Victim Relative Involvement in Traffic Collisions



Over the last 10 years (1999 to 2008), casualties resulting from traffic collisions have generally declined. The victim involvement rate for injuries has declined each year since 2003 (except in 2006 when the rate increased very slightly), with the rate in 2008 at its lowest in the past ten years.

Over this same time frame, the involvement rate for victims killed in traffic collisions has fluctuated substantially. However, the victim involvement rate in 2008 is not only down from 2007 and 2006, it is the lowest recorded in the past ten years.

Table 5-3 Collision Victims by Month of Occurrence and Casualty Type

Table 5-3
Total Victims by Month of Occurrence and Casualty Type: 2008

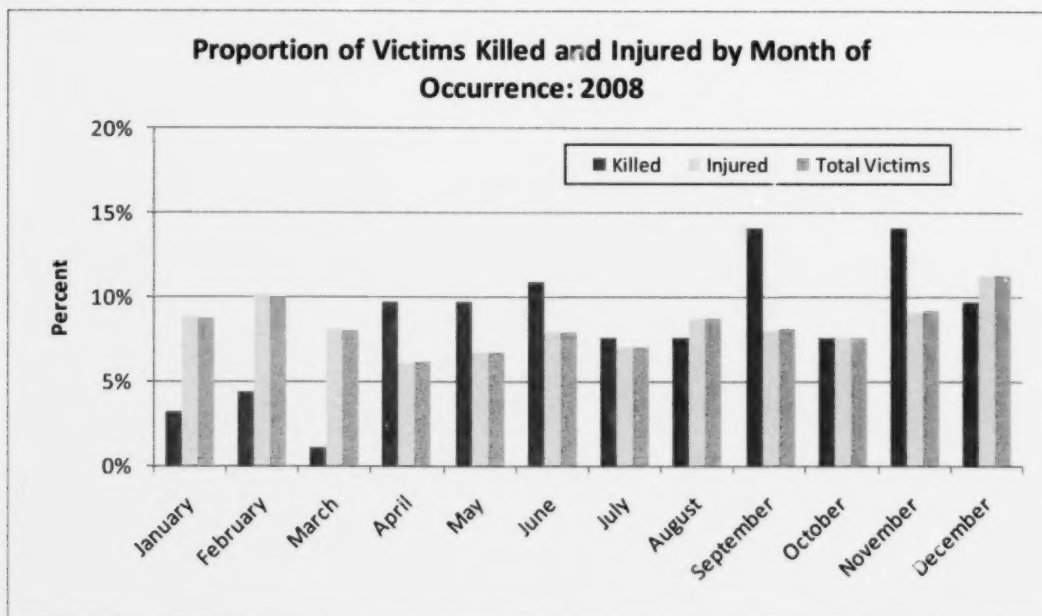
Month of Occurrence	2008 Casualty Type												2008 Total Victims	% of 2008 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
January	3	3.3%	28	7.1%	247	8.3%	311	8.4%	112	14.1%	698	8.9%	701	8.8%
February	4	4.3%	24	6.0%	269	9.0%	402	10.9%	104	13.1%	799	10.2%	803	10.1%
March	1	1.1%	37	9.3%	224	7.5%	305	8.3%	75	9.4%	641	8.2%	642	8.1%
April	9	9.8%	27	6.8%	223	7.5%	205	5.6%	28	3.5%	483	6.1%	492	6.2%
May	9	9.8%	35	8.8%	207	6.9%	222	6.0%	67	8.4%	531	6.8%	540	6.8%
June	10	10.9%	40	10.1%	255	8.6%	270	7.3%	56	7.1%	621	7.9%	631	7.9%
July	7	7.6%	35	8.8%	205	6.9%	249	6.7%	64	8.1%	553	7.0%	560	7.0%
August	7	7.6%	49	12.3%	277	9.3%	324	8.8%	41	5.2%	691	8.8%	698	8.8%
September	13	14.1%	30	7.6%	224	7.5%	317	8.6%	63	7.9%	634	8.1%	647	8.1%
October	7	7.6%	34	8.6%	253	8.5%	283	7.7%	31	3.9%	601	7.6%	608	7.6%
November	13	14.1%	37	9.3%	301	10.1%	340	9.2%	37	4.7%	715	9.1%	728	9.2%
December	9	9.8%	21	5.3%	294	9.9%	463	12.5%	116	14.6%	894	11.4%	903	11.4%
Total	92	100%	397	100%	2,979	100%	3,691	100%	794	100%	7,861	100%	7,953	100%

Table 5-3a Victims by Month of Occurrence and Casualty Type for Previous Five Years

Table 5-3a
 Victims by Month of Occurrence and Casualty Type: 2003 to 2007

Month of Occurrence	2003-2007 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
January	7	33	342	501	82	958	965	10.6%
February	6	24	271	383	68	746	753	8.3%
March	6	30	295	374	50	749	755	8.3%
April	5	29	223	249	52	554	559	6.1%
May	8	40	265	309	61	674	683	7.5%
June	10	39	302	335	69	745	755	8.3%
July	11	59	321	313	62	755	765	8.4%
August	13	55	311	316	63	745	758	8.3%
September	10	40	297	317	74	728	739	8.1%
October	15	41	317	359	75	791	806	8.9%
November	9	38	281	344	67	730	739	8.1%
December	8	36	294	387	85	801	810	8.9%
Total	108	463	3,520	4,186	808	8,977	9,085	100%

Victims are killed and injured in collisions most frequently in the late fall and winter months. In 2008, 39% of all victims were involved in traffic collisions from November through February, inclusive. This is relatively equal to the proportion in recent years. During the previous five years (2003 to 2007) on average, 36% of victims were involved in traffic collisions from November through February, inclusive.

Figure 5-2 Proportion of Victims Killed and Injured by Month of Occurrence

In 2008, victims were most frequently killed in collisions occurring September and November, followed by collisions occurring in April through June.

Table 5-4 Collision Victims by Day of Occurrence and Casualty Type

Table 5-4
Total Victims by Day of Occurrence and Casualty Type: 2008

Day of the Week	2008 Casualty Type												2008 Total Victims	% 2008 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Sunday	18	19.6%	56	14.1%	338	11.3%	383	10.4%	68	8.6%	845	10.7%	863	10.9%
Monday	4	4.3%	56	14.1%	434	14.6%	582	15.8%	109	13.7%	1,181	15.0%	1,185	14.9%
Tuesday	7	7.6%	68	17.1%	414	13.9%	534	14.5%	136	17.1%	1,152	14.7%	1,159	14.6%
Wednesday	15	16.3%	40	10.1%	401	13.5%	549	14.9%	105	13.2%	1,095	13.9%	1,110	14.0%
Thursday	14	15.2%	69	17.4%	470	15.8%	547	14.8%	132	16.6%	1,218	15.5%	1,232	15.5%
Friday	17	18.5%	46	11.6%	489	16.4%	598	16.2%	143	18.0%	1,276	16.2%	1,293	16.3%
Saturday	17	18.5%	62	15.6%	433	14.5%	498	13.5%	101	12.7%	1,094	13.9%	1,111	14.0%
Total	92	100%	397	100%	2,979	100%	3,691	100%	794	100%	7,861	100%	7,953	100%

Table 5-4a Victims by Day of Occurrence and Casualty Type for Previous Five Years

Table 5-4a
 Victims by Day of Occurrence and Casualty Type: 2003 to 2007

Day of the Week	2003-2007 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Sunday	21	65	429	439	79	1,013	1,034	11.4%
Monday	11	53	485	619	120	1,277	1,288	14.2%
Tuesday	10	55	475	601	125	1,256	1,265	13.9%
Wednesday	11	56	489	623	111	1,280	1,291	14.2%
Thursday	13	65	519	654	123	1,361	1,374	15.1%
Friday	17	75	600	699	143	1,518	1,535	16.9%
Saturday	25	94	522	551	107	1,274	1,299	14.3%
Total	108	463	3,520	4,186	808	8,977	9,085	100%

Victims are killed and injured in collisions most frequently on Thursday or Friday. In 2008, more victims were involved in traffic collisions on Thursday (nearly 16% of all victims) and Friday (16% of all victims) than any other day of the week. Over the previous five years (2003 to 2007) on average, Thursday and Friday has accounted for 15% and 17% of all victims in traffic collisions, respectively.

The weekend (including all day Friday, Saturday and Sunday) is when most victims are killed in traffic collisions. In 2008, Friday or Saturday accounted for nearly 19% (each) while Sunday accounted for nearly 20% of all victims killed in traffic collisions. This is a higher proportion than the previous five year period (2003 to 2007) on average, when the weekend accounted for nearly 43% of all victims killed in traffic collisions (17% on Friday, 14% on Saturday and 11% on Sunday).

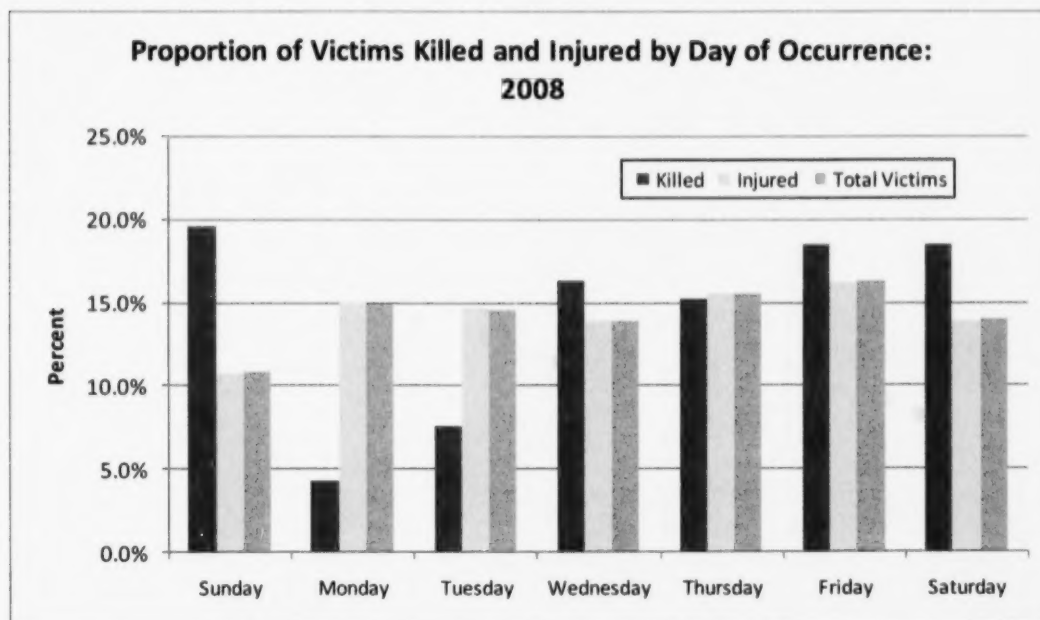
Figure 5-3 Proportion of Victims Killed and Injured by Day of Occurrence

Table 5-5 Collision Victims by Time of Occurrence and Casualty Type

Table 5-5
Total Victims by Time of Occurrence and Casualty Type: 2008

Time of the Day	2008 Casualty Type												2008 Total Victims	% of 2008 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
00:00 - 02:59	4	4.3%	24	6.0%	118	4.0%	117	3.2%	16	2.0%	275	3.5%	279	3.5%
03:00 - 05:59	12	13.0%	26	6.5%	82	2.8%	76	2.1%	9	1.1%	193	2.5%	205	2.6%
06:00 - 08:59	5	5.4%	37	9.3%	342	11.5%	422	11.4%	92	11.6%	893	11.4%	898	11.3%
09:00 - 11:59	5	5.4%	31	7.8%	356	12.0%	448	12.1%	99	12.5%	934	11.9%	939	11.8%
12:00 - 14:59	15	16.3%	64	16.1%	542	18.2%	721	19.5%	175	22.0%	1,502	19.1%	1,517	19.1%
15:00 - 17:59	16	17.4%	82	20.7%	659	22.1%	1,036	28.1%	201	25.3%	1,978	25.2%	1,994	25.1%
18:00 - 20:59	15	16.3%	65	16.4%	425	14.3%	449	12.2%	103	13.0%	1,042	13.3%	1,057	13.3%
21:00 - 23:59	13	14.1%	43	10.8%	269	9.0%	243	6.6%	57	7.2%	612	7.8%	625	7.9%
Not Stated	7	7.6%	25	6.3%	186	6.2%	179	4.8%	42	5.3%	432	5.5%	439	5.5%
Total	92	100%	397	100%	2,979	100%	3,691	100%	794	100%	7,861	100%	7,953	100%

Table 5-5a Victims by Time of Occurrence and Casualty Type for Previous Five Years

Table 5-5a
 Victims by Time of Occurrence and Casualty: 2003 to 2007

Time of the Day	2003-2007 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
00:00 - 02:59	13	40	143	114	26	323	336	3.7%
03:00 - 05:59	10	21	108	76	14	219	229	2.5%
06:00 - 08:59	11	37	377	449	82	945	956	10.5%
09:00 - 11:59	10	52	449	522	96	1,119	1,129	12.4%
12:00 - 14:59	14	62	652	857	153	1,725	1,739	19.1%
15:00 - 17:59	17	93	819	1,167	218	2,297	2,314	25.5%
18:00 - 20:59	14	70	476	516	108	1,170	1,184	13.0%
21:00 - 23:59	12	57	312	333	61	762	775	8.5%
Not Stated	7	31	185	152	49	417	424	4.7%
Total	108	463	3,520	4,186	808	8,977	9,085	100%

Victims are most often killed and injured in traffic collisions occurring between noon and 6 p.m. In 2008, 19% of all victims were involved in traffic collisions between 12:00-14:59 while another 25% were involved in traffic collisions between 15:00 to 17:59. This is consistent with the previous five years (2003 to 2007) on average (12:00-14:59 – 19% of all victims; 15:00 to 17:59 – nearly 26% of all victims).

Most victims were killed in traffic collisions between noon and midnight. In 2008, 64% of victims were killed between noon and midnight. In the previous five years (2003 to 2007) on average, 66% of victims were killed between noon and midnight.

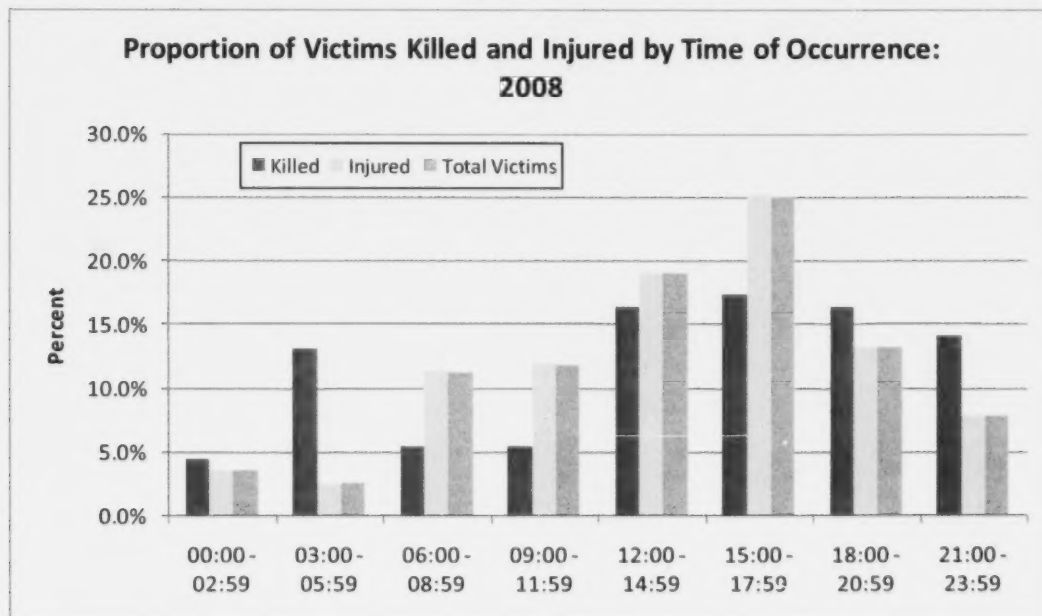
Figure 5-4 Proportion of Victims Killed and Injured by Time of Occurrence

Table 5-6 Collision Victims by Age Group, Casualty Type, and Gender

Table 5-6
Total Victims by Gender and Age Group and Casualty Type: 2008

Age Group		2008 Casualty Type											2008 Total Victims	% of 2008 Total Victims	
		Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured			% of Total Injured
Female	0-4	0	-	3	1.9%	18	1.2%	9	0.6%	1	1.4%	31	1.0%	31	0.9%
	5-9	1	4.0%	1	0.6%	46	3.0%	20	1.4%	1	1.4%	68	2.1%	69	2.1%
	10-14	0	-	3	1.9%	45	2.9%	41	2.8%	3	4.2%	92	2.8%	92	2.8%
	15-19	2	8.0%	28	17.7%	270	17.5%	156	10.6%	8	11.3%	462	14.2%	464	14.2%
	20-24	2	8.0%	17	10.8%	189	12.3%	159	10.8%	11	15.5%	376	11.6%	378	11.6%
	25-34	0	-	26	16.5%	268	17.4%	278	18.9%	12	16.9%	584	18.0%	584	17.9%
	35-44	5	20.0%	16	10.1%	246	16.0%	282	19.2%	12	16.9%	556	17.1%	561	17.2%
	45-54	6	24.0%	24	15.2%	212	13.7%	270	18.3%	12	16.9%	518	16.0%	524	16.0%
	55-64	3	12.0%	22	13.9%	130	8.4%	160	10.9%	7	9.9%	319	9.8%	322	9.9%
	65+	6	24.0%	18	11.4%	118	7.7%	97	6.6%	4	5.6%	237	7.3%	243	7.4%
	Not Stated	2	-	7	-	88	-	523	-	345	-	963	-	965	-
	Total Female	27	100%	165	100%	1,630	100%	1,995	100%	416	100%	4,206	100%	4,233	100%
Male	0-4	0	-	2	0.9%	18	1.4%	14	1.1%	1	1.4%	35	1.2%	35	1.2%
	5-9	0	-	0	-	38	3.0%	20	1.6%	2	2.7%	60	2.1%	60	2.1%
	10-14	0	-	6	2.7%	47	3.7%	36	2.9%	2	2.7%	91	3.2%	91	3.2%
	15-19	5	7.8%	23	10.2%	195	15.4%	135	10.9%	12	16.2%	365	13.0%	370	12.9%
	20-24	10	15.6%	36	15.9%	154	12.1%	151	12.2%	12	16.2%	353	12.6%	363	12.6%
	25-34	9	14.1%	34	15.0%	239	18.8%	220	17.8%	13	17.6%	506	18.0%	515	17.9%
	35-44	12	18.8%	40	17.7%	195	15.4%	237	19.1%	4	5.4%	476	17.0%	488	17.0%
	45-54	14	21.9%	31	13.7%	196	15.4%	208	16.8%	16	21.6%	451	16.1%	465	16.2%
	55-64	7	10.9%	33	14.6%	104	8.2%	137	11.1%	9	12.2%	283	10.1%	290	10.1%
	65+	7	10.9%	21	9.3%	83	6.5%	81	6.5%	3	4.1%	188	6.7%	195	6.8%
	Not Stated	1	-	6	-	80	-	455	-	303	-	844	-	845	-
	Total Male	65	100%	232	100%	1,349	100%	1,694	100%	377	100%	3,652	100%	3,717	100%

*Percentage of the total does not include the "not stated" category.

NOTE: There are two victims in 2008 not identified by gender or age group. Both received minimal injuries. These two victims are not included in Table 5-6.

Table 5-6a Victims by Gender and Age Group and Casualty Type for Previous Five Years

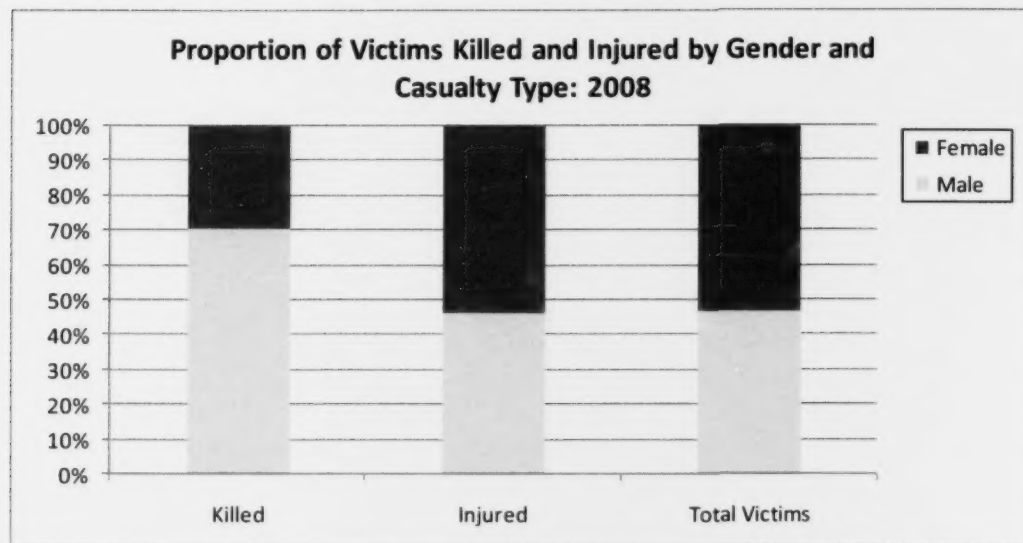
Table 5-6a
Victims by Gender and Age Group and Casualty Type: 2003 to 2007

Age Group		2003-2007 Average Count of Victims							
		Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Female	0-4	1	2	26	13	1	42	43	1.0%
	5-9	0	4	46	34	1	85	86	2.1%
	10-14	1	9	82	47	3	140	141	3.4%
	15-19	5	26	302	203	13	545	550	13.2%
	20-24	6	22	240	236	13	511	517	12.4%
	25-34	6	24	309	360	14	707	713	17.1%
	35-44	4	30	311	404	19	764	768	18.4%
	45-54	3	26	264	352	21	662	665	16.0%
	55-64	2	18	147	199	8	372	375	9.0%
	65+	8	30	140	124	7	301	309	7.4%
	Not Stated	2	8	85	392	319	805	807	-
Total Female		38	198	1,953	2,364	419	4,934	4,972	100%
Male	0-4	1	3	33	18	1	55	56	1.7%
	5-9	0	6	53	29	4	91	92	2.7%
	10-14	1	11	78	41	4	133	134	4.0%
	15-19	8	39	230	158	9	437	445	13.2%
	20-24	9	33	204	162	13	412	422	12.5%
	25-34	11	45	240	258	18	560	571	17.0%
	35-44	10	39	239	300	14	592	602	17.9%
	45-54	10	31	193	250	15	489	499	14.8%
	55-64	5	24	111	147	8	290	295	8.8%
	65+	12	26	113	93	5	237	249	7.4%
	Not Stated	2	10	72	366	298	746	748	-
Total Male		70	265	1,566	1,822	388	4,042	4,112	100%

*Percentage of the total does not include the "not stated" category.

Collision victims aged 25 to 34 account for the highest proportion of casualties in 2008 (18% of all victims), closely followed by those aged 35 to 44 (17% of all victims) and 45 to 54 (16% of all victims). In the previous five years (2003 to 2007) on average, the proportion of victims aged 25-34 (14% of all victims) was just below those aged 35 to 44 (15% of all victims); victims aged 45 to 54 accounted for the third highest proportion at 13% of all victims.

Victims killed in traffic collisions tend to be older. Nearly half (48%) of all victims killed in traffic collisions in 2008 were aged 45 and older (45 to 54 – 22% of all victims; 55 to 64 – 11% of all victims; 65 and older 15% of all victims). This is higher than in the previous five years (2003 to 2007) on average, when 38% of victims were aged 45 and older, 16% were 25 to 34 years old, and 32% were under 25 years old.

Figure 5-5 Proportion of Victims Killed and Injured by Gender and Casualty Type

While women account for just over half of all casualties in traffic collisions (53%), men account for a higher proportion of fatalities (nearly 71%) and serious injuries (58%).

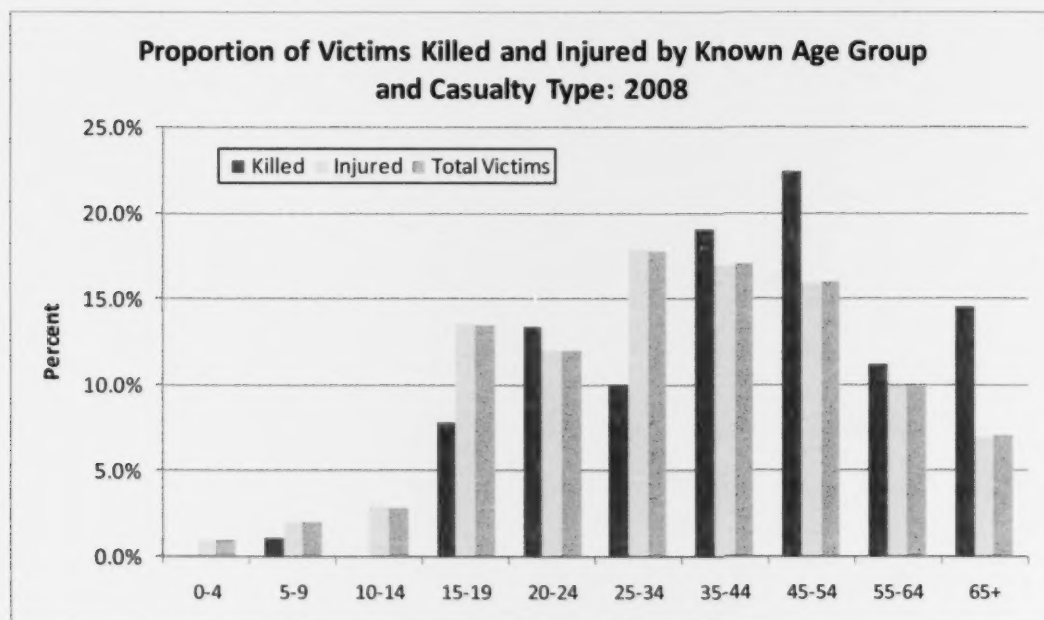
Figure 5-6 Proportion of Victims Killed and Injured by Age Group and Casualty Type

Table 5-7 Casualty Involvement Rate (per 100,000 people) by Gender and Age Group and Casualty Type

Table 5-7
Casualty Involvement (per 100,000 people) by Gender and Age Group and Casualty Type: 2008

Age Group		2008 Casualty Type						2008 Total Victims	2003-2007 average Casualty Involvement Rate						
		Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured		Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims
Female	0-4	-	8.2	49.3	24.7	2.7	84.9	84.9	2.9	5.2	75.6	36.1	3.4	120.3	123.2
	5-9	2.8	2.8	126.7	55.1	2.8	187.3	190.0	0.5	11.2	122.8	91.3	2.7	227.9	228.4
	10-14	-	7.5	112.3	102.3	7.5	229.5	229.5	1.4	20.7	196.9	112.9	7.7	338.3	339.7
	15-19	4.7	65.3	630.0	364.0	18.7	1,078.0	1,082.6	11.6	63.7	729.7	490.8	30.4	1314.6	1326.2
	20-24	4.9	41.7	463.3	389.7	27.0	921.7	926.6	16.2	54.6	606.5	596.4	32.9	1290.4	1306.6
	25-34	-	33.6	346.8	359.7	15.5	755.7	755.7	7.9	32.1	407.0	473.3	17.9	930.3	938.2
	35-44	6.1	19.5	299.6	343.4	14.6	677.1	683.1	4.6	34.4	361.7	469.8	22.1	888.0	892.6
	45-54	6.7	26.7	235.8	300.4	13.3	576.3	582.9	4.0	30.2	308.5	411.5	24.3	774.6	778.6
	55-64	4.4	32.2	190.4	234.3	10.3	467.2	471.6	3.9	29.7	239.4	325.0	13.7	607.9	611.8
	65+	14.1	42.3	277.4	228.0	9.4	557.1	571.2	4.4	18.9	207.3	952.2	775.4	1953.8	1958.2
Total Female		4.4	27.1	268.1	328.2	68.4	691.9	696.3	6.5	33.3	328.1	397.2	70.4	829.0	835.4
Male	0-4	-	5.3	47.4	36.8	2.6	92.1	92.1	2.7	8.7	89.0	49.7	2.7	150.1	152.8
	5-9	-	-	98.6	51.9	5.2	155.7	155.7	0.5	15.2	133.5	72.3	10.1	231.0	231.5
	10-14	-	14.2	111.0	85.0	4.7	214.9	214.9	2.3	24.5	179.9	94.1	8.8	307.3	309.6
	15-19	11.3	51.9	440.1	304.7	27.1	823.8	835.1	18.9	89.6	531.8	366.0	21.7	1009.1	1028.1
	20-24	24.3	87.6	374.8	367.5	29.2	859.1	883.5	23.3	82.0	506.2	402.4	33.3	1023.9	1047.2
	25-34	11.7	44.4	311.8	287.0	17.0	660.2	672.0	14.6	59.3	317.5	341.1	23.3	741.2	755.8
	35-44	14.7	49.0	238.8	290.2	4.9	582.9	597.6	11.9	45.4	278.6	349.4	15.8	689.2	701.1
	45-54	15.5	34.2	216.4	229.6	17.7	497.8	513.3	11.4	35.7	225.4	292.5	17.5	571.2	582.7
	55-64	10.5	49.4	155.7	205.1	13.5	423.6	434.1	8.0	39.2	185.2	245.1	12.6	482.1	490.1
	65+	18.0	54.0	213.4	208.3	7.7	483.4	501.4	32.2	68.6	303.5	250.4	12.3	634.9	667.1
Total Male		11.0	39.3	228.2	286.6	63.8	617.9	628.9	12.1	45.8	270.8	315.1	67.1	698.8	710.9

Overall, women have a higher casualty involvement rate than men in 2008. The casualty involvement rate for females in all traffic collisions is 696.3 while for males it is 628.9 (per 100,000 people). However, men have higher casualty involvement rates than women when it comes to death and sustaining serious injuries. Casualty involvement by gender overall in 2008 (per 100,000 people):

- Victims killed – Males 11.0, Females 4.4;
- Victims seriously injured – Males 39.3, Females 27.1;
- Victims sustaining minor injuries – Males 228.2, Females 268.1;
- Victims sustaining minimal injuries – Males 286.6, Females 328.2; and,
- Victims sustaining "other" injuries – Males 63.8, Females 68.4.

Young people aged 15 to 24 have the highest casualty involvement rates overall in 2008 and in the previous five years (2003 to 2007) on average.

In 2008, women aged 15 to 19 had the highest casualty involvement rate of any age-gender group, at 1,082.6 victims per 100,000 people overall. This rate is more than 1.5 times the casualty rate for women overall (696.3) and 1.3 times the casualty rate for men in the same age group (835.1 for males aged 15 to 19).

Casualty involvement rates in 2008 have decreased by an average of 14% compared to casualty involvement rates in the previous five years (2003 to 2007) on average. For women, casualty involvement for victims overall has decreased by 17%; for men, the rate has decreased by 12%.

Casualty involvement rates for women (overall victims) in 2008 compared to the previous five years on average:

- Under 15 years of age have decreased by 27%;
- 15 to 19 have decreased by 18%;
- 20 to 24 have decreased by 29%;
- 25 to 34 have decreased by 19%;
- 35 to 44 have decreased by 23%;
- 45 to 54 have decreased by 25%;
- 55 to 64 have decreased by 23%; and,
- 65 and older have decreased by 71%.

Casualty involvement rates for men (overall victims) in 2008 compared to the previous five years on average:

- Under 15 years of age have decreased by 34%;
- 15 to 19 have decreased by 19%;
- 20 to 24 have decreased by 16%;
- 25 to 34 have decreased by 11%;
- 35 to 44 have decreased by 15%;
- 45 to 54 have decreased by 12%;
- 55 to 64 have decreased by 11%; and,
- 65 and older have decreased by 25%.

Table 5-8 Collision Victims Killed by Road User Class and Age Group

Table 5-8

Total Victims by Road User Class and Age Group and Casualty Type: 2008

Age Group		2008 Casualty Type												2008 Total Victims	% of 2008 Total Victims
		Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Driver	0-4	0	-	1	0.5%	0	-	0	-	1	1.2%	2	<0.1%	2	<0.1%
	5-9	0	-	0	-	2	0.1%	1	<0.1%	0	-	3	<0.1%	3	<0.1%
	10-14	0	-	1	0.5%	6	0.4%	1	<0.1%	2	2.4%	10	0.3%	10	0.2%
	15-19	6	12.2%	26	12.6%	248	14.6%	191	9.5%	9	10.8%	474	11.9%	480	11.9%
	20-24	8	16.3%	26	12.6%	228	13.5%	228	11.4%	12	14.5%	494	12.4%	502	12.4%
	25-34	4	8.2%	38	18.4%	338	19.9%	389	19.4%	13	15.7%	778	19.5%	782	19.4%
	35-44	8	16.3%	30	14.5%	325	19.2%	423	21.1%	14	16.9%	792	19.9%	800	19.8%
	45-54	9	18.4%	26	12.6%	273	16.1%	402	20.1%	18	21.7%	719	18.0%	728	18.0%
	55-64	6	12.2%	36	17.4%	158	9.3%	236	11.8%	11	13.3%	441	11.1%	447	11.1%
	65+	8	16.3%	23	11.1%	117	6.9%	133	6.6%	3	3.6%	276	6.9%	284	7.0%
	Not Stated	1	-	7	-	99	-	632	-	447	-	1,185	-	1,186	-
	Total Drivers*	50	100%	214	100%	1,794	100%	2,636	100%	530	100%	5,174	100%	5,224	100%
Passenger	0-4	0	-	2	2.1%	28	3.3%	21	3.4%	1	2.3%	52	3.3%	52	3.2%
	5-9	0	-	0	-	63	7.5%	37	6.1%	2	4.7%	102	6.4%	102	6.4%
	10-14	0	-	2	2.1%	68	8.1%	61	10.0%	0	-	131	8.3%	131	8.2%
	15-19	0	-	19	20.0%	179	21.4%	86	14.1%	9	20.9%	293	18.5%	293	18.3%
	20-24	2	10.5%	14	14.7%	88	10.5%	70	11.5%	9	20.9%	181	11.4%	183	11.4%
	25-34	5	26.3%	13	13.7%	117	14.0%	99	16.3%	8	18.6%	237	15.0%	242	15.1%
	35-44	5	26.3%	13	13.7%	87	10.4%	80	13.1%	1	2.3%	181	11.4%	186	11.6%
	45-54	4	21.1%	20	21.1%	87	10.4%	60	9.9%	7	16.3%	174	11.0%	178	11.1%
	55-64	1	5.3%	6	6.3%	53	6.3%	54	8.9%	4	9.3%	117	7.4%	118	7.4%
	65+	2	10.5%	6	6.3%	68	8.1%	41	6.7%	2	4.7%	117	7.4%	119	7.4%
	Not Stated	0	-	1	-	45	-	163	-	96	-	305	-	305	-
	Total Passengers*	19	100%	96	100%	883	100%	772	100%	139	100%	1,890	100%	1,909	100%

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Section 5

Collision Victims

(Continued from previous page)

Age Group		2008 Casualty Type												2008 Total Victims	% of 2008 Total Victims
		Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Motorcyclist	0-4	0	-	0	-	0	-	0	-	0	-	0	-	0	-
	5-9	0	-	0	-	0	-	0	-	0	-	0	-	0	-
	10-14	0	-	0	-	1	1.8%	0	-	0	-	1	1.0%	1	0.9%
	15-19	1	25.0%	0	-	3	5.4%	4	18.2%	0	-	7	6.7%	8	7.4%
	20-24	0	-	6	24.0%	10	17.9%	2	9.1%	0	-	18	17.3%	18	16.7%
	25-34	0	-	5	20.0%	10	17.9%	2	9.1%	0	-	17	16.3%	17	15.7%
	35-44	2	50.0%	4	16.0%	7	12.5%	7	31.8%	0	-	18	17.3%	20	18.5%
	45-54	0	-	6	24.0%	15	26.8%	5	22.7%	1	100.0%	27	26.0%	27	25.0%
	55-64	1	25.0%	4	16.0%	9	16.1%	1	4.5%	0	-	14	13.5%	15	13.9%
	65+	0	-	0	-	1	1.8%	1	4.5%	0	-	2	1.9%	2	1.9%
	Not Stated	0	-	0	-	2	-	19	-	6	-	27	-	27	-
	Total Motorcyclists*	4	100%	25	100%	58	100%	41	100%	7	100%	131	100%	135	100%
Moped	0-4	0	-	0	-	0	-	0	-	0	-	0	-	0	-
	5-9	0	-	0	-	0	-	0	-	0	-	0	-	0	-
	10-14	0	-	0	-	0	-	0	-	0	-	0	-	0	-
	15-19	0	-	0	-	0	-	0	-	0	-	0	-	0	-
	20-24	0	-	0	-	0	-	0	-	0	-	0	-	0	-
	25-34	0	-	0	-	0	-	0	-	0	-	0	-	0	-
	35-44	0	-	0	-	1	50.0%	0	-	0	-	1	50.0%	1	33.3%
	45-54	1	100.0%	0	-	0	-	0	-	0	-	0	-	1	33.3%
	55-64	0	-	0	-	0	-	0	-	0	-	0	-	0	-
	65+	0	-	0	-	1	50.0%	0	-	0	-	1	50.0%	1	33.3%
	Not Stated	0	-	0	-	1	-	2	-	1	-	4	-	4	-
	Total Moped*	1	100%	0	0%	3	100%	2	0%	1	0%	6	100%	7	100%

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Collision Victims

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Age Group		2008 Casualty Type												2008 Total Victims	% of 2008 Total Victims
		Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Bicyclist	0-4	0	-	0	-	0	-	0	-	0	-	0	-	0	-
	5-9	0	-	1	8.3%	9	11.0%	1	2.9%	0	-	11	8.3%	11	8.1%
	10-14	0	-	1	8.3%	8	9.8%	11	31.4%	0	-	20	15.2%	20	14.8%
	15-19	0	-	2	16.7%	14	17.1%	6	17.1%	0	-	22	16.7%	22	16.3%
	20-24	0	-	1	8.3%	4	4.9%	6	17.1%	0	-	11	8.3%	11	8.1%
	25-34	0	-	0	-	20	24.4%	4	11.4%	3	100.0%	27	20.5%	27	20.0%
	35-44	1	33.3%	4	33.3%	14	17.1%	1	2.9%	0	-	19	14.4%	20	14.8%
	45-54	2	66.7%	0	-	9	11.0%	1	2.9%	0	-	10	7.6%	12	8.9%
	55-64	0	-	2	16.7%	2	2.4%	3	8.6%	0	-	7	5.3%	7	5.2%
	65+	0	-	1	8.3%	2	2.4%	2	5.7%	0	-	5	3.8%	5	3.7%
	Not Stated	0	-	1	-	5	-	71	-	26	-	103	-	103	-
	Total Bicyclists*	3	100%	13	100%	87	100%	106	100%	29	100%	235	100%	238	100%
Pedestrian	0-4	0	-	2	4.4%	8	5.8%	2	4.9%	0	-	12	5.0%	12	4.8%
	5-9	1	7.7%	0	-	10	7.3%	1	2.4%	1	6.7%	12	5.0%	13	5.2%
	10-14	0	-	5	11.1%	9	6.6%	4	9.8%	3	20.0%	21	8.8%	21	8.4%
	15-19	0	-	4	8.9%	21	15.3%	4	9.8%	2	13.3%	31	13.0%	31	12.4%
	20-24	2	15.4%	6	13.3%	13	9.5%	4	9.8%	2	13.3%	25	10.5%	27	10.8%
	25-34	0	-	4	8.9%	22	16.1%	4	9.8%	1	6.7%	31	13.0%	31	12.4%
	35-44	1	7.7%	5	11.1%	7	5.1%	8	19.5%	1	6.7%	21	8.8%	22	8.8%
	45-54	4	30.8%	3	6.7%	24	17.5%	10	24.4%	2	13.3%	39	16.4%	43	17.1%
	55-64	2	15.4%	7	15.6%	11	8.0%	3	7.3%	1	6.7%	22	9.2%	24	9.6%
	65+	3	23.1%	9	20.0%	12	8.8%	1	2.4%	2	13.3%	24	10.1%	27	10.8%
	Not Stated	2	-	4	-	16	-	93	-	73	-	186	-	188	-
	Total Pedestrians*	15	100%	49	100%	153	100%	134	100%	88	100%	424	100%	439	100%

*Percentage of the total does not include the "not stated" category.

NOTE: The road user class "Riding/Hanging On" has not been reported in the above as there are too few victims in this class to report in any meaningful fashion. In 2008, there was one minor injury to a male aged 55 to 64 in this class.

Table 5-8a Victims by Road User Class and Age Group and Casualty Type for Previous Five Years

Table 5-8a
Victims by Road User Class and Age Group and Casualty Type: 2003 to 2007

Age Group		2003-2007 Average Count of Victims							
		Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Driver	0-4	0	0	1	1	1	3	3	<0.1%
	5-9	0	0	2	2	0	5	5	0.1%
	10-14	0	3	5	3	0	11	11	0.2%
	15-19	7	30	269	208	11	518	525	10.8%
	20-24	8	28	279	288	17	612	620	12.8%
	25-34	10	37	378	474	20	908	919	18.9%
	35-44	8	42	400	574	24	1,040	1,048	21.6%
	45-54	8	32	323	494	28	877	884	18.2%
	55-64	5	25	177	273	12	486	491	10.1%
	65+	12	29	150	146	6	331	343	7.1%
	Not Stated	1	8	77	482	404	972	973	-
	Total Drivers*	60	234	2,061	2,944	523	5,763	5,823	100%
Passenger	0-4	1	4	52	28	1	85	86	4.1%
	5-9	0	5	68	56	3	131	131	6.3%
	10-14	1	9	106	73	4	192	193	9.3%
	15-19	5	27	217	138	9	391	396	19.0%
	20-24	5	19	125	89	6	239	245	11.7%
	25-34	5	20	125	124	9	277	282	13.5%
	35-44	3	14	106	107	5	233	235	11.3%
	45-54	3	12	93	93	5	203	206	9.9%
	55-64	1	9	59	65	3	137	138	6.6%
	65+	4	18	82	66	3	168	173	8.3%
	Not Stated	1	5	57	111	101	274	275	-
	Total Passengers*	30	142	1,089	950	149	2,330	2,360	100%
Motorcyclist	0-4	0	0	0	0	0	0	0	0.4%
	5-9	0	0	0	0	0	1	1	0.6%
	10-14	0	0	1	0	0	1	1	1.0%
	15-19	0	1	5	2	0	8	8	8.3%
	20-24	0	2	11	5	1	19	19	19.4%
	25-34	0	4	11	5	1	20	20	20.6%
	35-44	1	4	9	4	1	17	18	18.4%
	45-54	1	5	9	4	0	18	18	18.6%
	55-64	1	4	4	2	0	11	11	11.5%
	65+	0	0	1	0	0	1	1	1.0%
	Not Stated	0	1	4	11	11	28	28	-
	Total Motorcyclists*	3	21	54	34	14	124	126	100%

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Collision Victims

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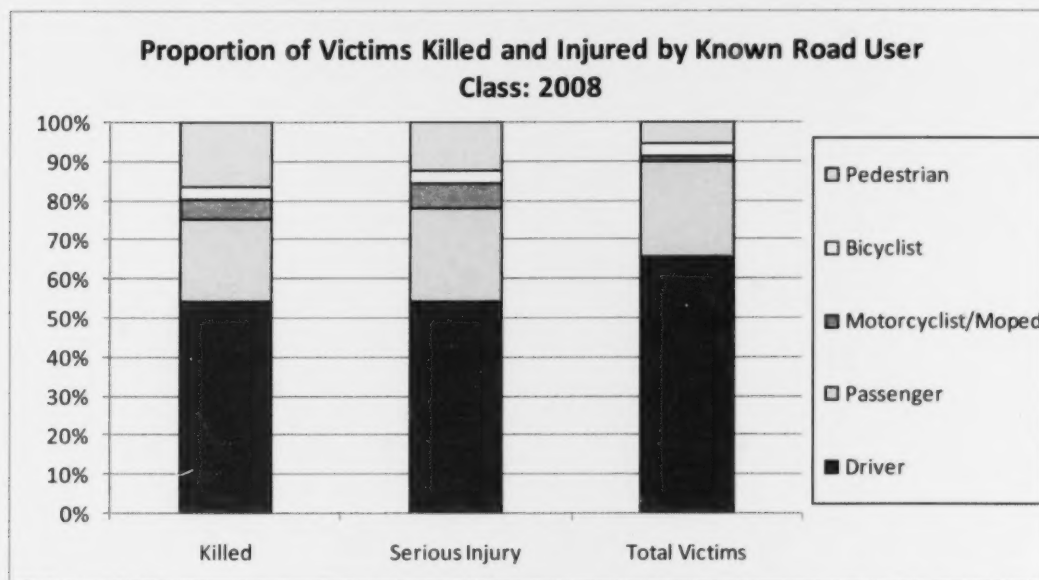
Age Group		2003-2007 Average Count of Victims							
		Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Moped	0-4	0	0	0	0	0	0	0	-
	5-9	0	0	0	0	0	0	0	-
	10-14	0	0	0	0	0	0	0	5.3%
	15-19	0	0	0	0	0	1	1	15.8%
	20-24	0	0	0	0	0	0	0	10.5%
	25-34	0	0	0	0	0	1	1	15.8%
	35-44	0	0	1	0	0	1	1	26.3%
	45-54	0	0	1	0	0	1	1	21.1%
	55-64	0	0	0	0	0	0	0	5.3%
	65+	0	0	0	0	0	0	0	-
	Not Stated	0	0	0	0	0	0	0	-
	Total Moped*	0	1	3	0	0	4	4	100%
Bicyclist	0-4	0	0	1	0	0	1	1	0.7%
	5-9	0	1	10	2	0	13	13	7.5%
	10-14	0	3	23	7	1	33	33	18.7%
	15-19	0	1	18	8	1	28	28	16.0%
	20-24	1	1	14	8	1	23	24	13.6%
	25-34	0	1	13	6	0	20	20	11.5%
	35-44	0	1	15	7	1	25	25	14.0%
	45-54	1	2	12	7	0	21	22	12.2%
	55-64	0	1	4	1	0	6	7	3.7%
	65+	0	0	3	0	0	3	4	2.1%
	Not Stated	0	1	7	62	42	111	112	-
	Total Bicyclists*	2	12	120	108	46	286	289	100%
Pedestrian	0-4	1	1	5	1	0	7	9	2.7%
	5-9	0	4	18	3	2	27	27	8.6%
	10-14	0	4	25	5	2	36	36	11.6%
	15-19	1	5	23	6	1	35	36	11.6%
	20-24	1	4	15	8	2	29	30	9.6%
	25-34	2	8	21	9	2	39	41	13.0%
	35-44	2	8	20	10	2	40	42	13.4%
	45-54	1	6	19	5	2	32	33	10.5%
	55-64	0	3	14	4	1	22	22	7.0%
	65+	3	8	18	5	2	34	37	11.9%
	Not Stated	2	3	12	91	59	165	167	-
	Total Pedestrians*	14	53	190	147	75	466	480	100%

*Percentage of the total does not include the "not stated" category.

NOTE: The road user class "Riding/Hanging On" has not been reported in the above as there are too few victims in this class to report in any meaningful fashion. In 2003 to 2007 on average, there are three injuries in this road user class, one minor, one minimal and one unspecified.

In 2008, "Drivers" account for 66% of all casualties and motor vehicle "Passengers" for 24%. "Pedestrians" (nearly 6% of all casualties) and "Bicyclists" (3%) are the next largest "Road User Class" victim groups.

Note: Motorcyclist, bicyclist, moped include passengers on those vehicles.

Figure 5-8 Proportion of Victims Killed and Injured by Road User Class

Pedestrians and motorcyclists/mopeds account for a much higher proportion of victims killed and seriously injured than they represent among all victims in traffic collisions.

- In terms of victims killed in traffic collisions, "Drivers" account for the largest proportion in 2008 at 54%, followed by motor vehicle "Passengers" at 21%, "Pedestrians" at 16% and "Motorcyclists"/"Mopeds" at 5%.
- In terms of victims seriously injured in traffic collisions, "Drivers" account for the largest proportion in 2008 at 54%, followed by motor vehicle "Passengers" at 24%, "Pedestrians" at 12% and "Motorcyclists"/"Mopeds" at 6%.

Table 5-9 Collision Victims by Collision Type and Casualty Type

Table 5-9
Total Victims by Collision Type and Casualty Type: 2008

Collision Type	2008 Casualty Type												2008 Total Victims	% of 2008 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Collision with pedestrian	16	17.4%	46	11.6%	151	5.1%	136	3.7%	90	11.3%	423	5.4%	439	5.5%
Collision with other motor vehicle	34	37.0%	166	41.8%	1,793	60.2%	2,839	76.9%	595	74.9%	5,393	68.6%	5,427	68.2%
Collisions with train	1	1.1%	2	0.5%	4	0.1%	0	-	0	-	6	<0.1%	7	<0.1%
Collision with motorcycle	4	4.3%	23	5.8%	60	2.0%	44	1.2%	9	1.1%	136	1.7%	140	1.8%
Collision with bicycle	3	3.3%	13	3.3%	87	2.9%	117	3.2%	31	3.9%	248	3.2%	251	3.2%
Collision with animal	0	-	8	2.0%	69	2.3%	109	3.0%	5	0.6%	191	2.4%	191	2.4%
Collision with fixed object	5	5.4%	23	5.8%	131	4.4%	133	3.6%	30	3.8%	317	4.0%	322	4.0%
Collision with other object	7	7.6%	6	1.5%	31	1.0%	27	0.7%	8	1.0%	72	0.9%	79	1.0%
Overtaken in roadway	6	6.5%	47	11.8%	222	7.5%	77	2.1%	3	0.4%	349	4.4%	355	4.5%
Ran off roadway	15	16.3%	62	15.6%	431	14.5%	205	5.6%	23	2.9%	721	9.2%	736	9.3%
Other non-collision	1	1.1%	1	0.3%	0	-	4	0.1%	0	-	5	<0.1%	6	<0.1%
Total	92	100%	397	100%	2,979	100%	3,691	100%	794	100%	7,861	100%	7,953	100%

Table 5-9a Victims by Collision Type and Casualty Type for Previous Five Years

Table 5-9a
 Victims by Collision Type and Casualty Type: 2003 to 2007

Collision Type	2003-2007 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Collision with pedestrian	14	53	193	152	77	475	489	5.4%
Collision with other motor vehicle	44	190	2,205	3,305	590	6,289	6,333	69.7%
Collisions with train	2	3	7	2	0	12	14	0.2%
Collision with motorcycle	3	19	54	34	13	120	123	1.4%
Collision with bicycle	2	12	124	113	47	297	299	3.3%
Collision with animal	0	8	80	123	9	220	220	2.4%
Collision with fixed object	5	22	159	140	26	347	351	3.9%
Collision with other object	3	12	32	30	5	78	81	0.9%
Overtaken in roadway	8	24	96	43	5	168	176	1.9%
Ran off roadway	28	120	564	240	34	958	986	10.8%
Other non-collision	0	1	6	5	1	13	13	0.1%
Total	108	463	3,520	4,186	808	8,977	9,085	100%

"Motor vehicle to motor vehicle" collisions account for the majority of casualties in Manitoba, both in 2008 and in the previous five years (2003 to 2007) on average. In 2008:

- 68% of all casualties result from motor vehicle to motor vehicle collisions;
- 37% of victims killed result from motor vehicle to motor vehicle collisions; and,
- 42% of seriously injured victims result from motor vehicle to motor vehicle collisions.

"Collision with a pedestrian" and "collision with motorcycle" both account for a much higher proportion of victims killed than of victims injured in traffic collisions. In 2008, "collision with pedestrian" accounts for more than three times as many victims killed (17% of total killed) as it does of victims injured (5% of total injured). "Collision with motorcycle" accounts for two and half times as many victims killed (4% of total killed) as it does of victims injured (less than 2% of total injured).

Table 5-10 Collision Victims by Accident Configuration and Casualty Type

Table 5-10
Total Victims by Accident Configuration and Casualty Type: 2008

Accident Configuration	2008 Casualty Type												2008 Total Victims	% of 2008 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Rear End	10	10.9%	41	10.3%	548	18.4%	1425	38.6%	211	26.6%	2225	28.3%	2235	28.1%
Head On	16	17.4%	31	7.8%	80	2.7%	47	1.3%	14	1.8%	172	2.2%	188	2.4%
Side Swipe Opposing	2	2.2%	4	1.0%	26	0.9%	42	1.1%	8	1.0%	80	1.0%	82	1.0%
Side Swipe Same Direction	1	1.1%	4	1.0%	42	1.4%	90	2.4%	10	1.3%	146	1.9%	147	1.8%
Overtaking	2	2.2%	2	0.5%	28	0.9%	44	1.2%	14	1.8%	88	1.1%	90	1.1%
Right Turn - Same direction	0	-	2	0.5%	13	0.4%	20	0.5%	4	0.5%	39	0.5%	39	0.5%
Right Turn - Opposing	0	-	0	-	6	0.2%	11	0.3%	5	0.6%	22	0.3%	22	0.3%
Left Turn - Opposing	0	-	5	1.3%	32	1.1%	31	0.8%	14	1.8%	82	1.0%	82	1.0%
Left Turn - Same direction	0	-	1	0.3%	15	0.5%	16	0.4%	2	0.3%	34	0.4%	34	0.4%
Left Turn - Across	2	2.2%	13	3.3%	164	5.5%	206	5.6%	28	3.5%	411	5.2%	413	5.2%
Intersection 90°	8	8.7%	61	15.4%	570	19.1%	622	16.9%	125	15.7%	1,378	17.5%	1,386	17.4%
Off Road Right	11	12.0%	38	9.6%	309	10.4%	128	3.5%	6	0.8%	481	6.1%	492	6.2%
Off Road Left	13	14.1%	53	13.4%	222	7.5%	109	3.0%	11	1.4%	395	5.0%	408	5.1%
Fixed Object	2	2.2%	15	3.8%	73	2.5%	94	2.5%	17	2.1%	199	2.5%	201	2.5%
Parking	1	1.1%	1	0.3%	9	0.3%	6	0.2%	1	0.1%	17	0.2%	18	0.2%
Pedestrian	12	13.0%	42	10.6%	138	4.6%	137	3.7%	81	10.2%	398	5.1%	410	5.2%
Other	12	13.0%	84	21.2%	704	23.6%	663	18.0%	243	30.6%	1,694	21.5%	1,706	21.5%
Total	92	100%	397	100%	2,979	100%	3,691	100%	794	100%	7,861	100%	7,953	100%

Note: "Other" accident configurations consist primarily of collisions involving more than one configuration or sequence of events.

Table 5-10a Victims by Accident Configuration and Casualty Type for Previous Five Years

Table 5-10a
Victims by Accident Configuration and Casualty Type: 2003 to 2007

Accident Configuration	2003-2007 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Rear End	4	32	725	1,703	235	2,695	2,699	29.7%
Head On	17	29	82	45	12	168	185	2.0%
Side Swipe Opposing	1	5	39	40	6	91	92	1.0%
Side Swipe Same Direction	1	7	54	106	19	185	186	2.0%
Overtaking	0	3	41	48	8	100	100	1.1%
Right Turn - Same direction	0	1	14	21	5	41	41	0.4%
Right Turn - Opposing	0	0	9	12	2	24	24	0.3%
Left Turn - Opposing	0	4	34	44	10	92	92	1.0%
Left Turn - Same direction	0	1	21	24	4	50	50	0.6%
Left Turn - Across	0	16	212	220	47	496	496	5.5%
Intersection 90°	16	80	728	708	134	1,651	1,667	18.4%
Off Road Right	16	64	285	131	17	497	513	5.6%
Off Road Left	15	50	232	104	13	400	415	4.6%
Fixed Object	3	12	106	94	13	224	228	2.5%
Parking	0	1	9	24	2	36	36	0.4%
Pedestrian	11	44	174	137	73	428	439	4.8%
Other	22	113	754	726	208	1,801	1,823	20.1%
Total	108	463	3,520	4,186	808	8,977	9,085	100%

"Rear end" collisions and those occurring at 90° intersections account for the highest proportions of total victims. In 2008:

- "Rear end" accounts for 28% of all victims, 11% of victims killed and 10% of victims seriously injured; and,
- "Intersection 90°" accounts for 17% of all victims, 9% of victims killed and 15% of victims seriously injured.

Victims are most often killed in traffic collisions where the vehicle leaves the road, meets another vehicle head on, or hits a pedestrian. In 2008:

- "Off road right" and "off road left" account for 26% of victims killed;
- "Head on" accounts for 17% of victims killed; and,
- "Pedestrian" accounts for 13% of victims killed.

Table 5-11 Collision Victims by Provincial Location and Casualty Type

Table 5-11
Total Victims by Provincial Location and Casualty Type: 2008

Location	2008 Casualty Type												2008 Total Victims	% of 2008 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Winnipeg	18	19.6%	116	29.2%	1411	47.4%	2759	74.7%	672	84.6%	4958	63.1%	4976	62.6%
Brandon	1	1.1%	9	2.3%	136	4.6%	109	3.0%	8	1.0%	262	3.3%	263	3.3%
Portage	1	1.1%	1	0.3%	32	1.1%	15	0.4%	6	0.8%	54	0.7%	55	0.7%
Flin Flon	0	-	1	0.3%	10	0.3%	4	0.1%	1	0.1%	16	0.2%	16	0.2%
Dauphin	1	1.1%	3	0.8%	24	0.8%	7	0.2%	3	0.4%	37	0.5%	38	0.5%
Thompson	0	-	0	-	16	0.5%	10	0.3%	0	-	26	0.3%	26	0.3%
The Pas	0	-	0	-	13	0.4%	8	0.2%	4	0.5%	25	0.3%	25	0.3%
Selkirk	0	-	1	0.3%	22	0.7%	19	0.5%	5	0.6%	47	0.6%	47	0.6%
Other Urban	9	9.8%	39	9.8%	224	7.5%	218	5.9%	30	3.8%	511	6.5%	520	6.5%
All Rural	62	67.4%	227	57.2%	1,091	36.6%	542	14.7%	65	8.2%	1,925	24.5%	1,987	25.0%
Total	92	100%	397	100%	2,979	100%	3,691	100%	794	100%	7,861	100%	7,953	100%

Table 5-11a Victims by Provincial Location and Casualty Type for Previous Five Years

Table 5-11a
Victims by Provincial Location and Casualty: 2003 to 2007

Location	2003-2007 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Winnipeg	20	114	1,784	3,167	681	5,746	5,766	63.5%
Brandon	1	9	151	120	16	295	295	3.3%
Portage	0	5	47	32	3	87	87	1.0%
Flin Flon	0	0	9	4	2	16	17	0.2%
Dauphin	0	3	25	14	1	43	43	0.5%
Thompson	0	1	24	12	2	38	39	0.4%
The Pas	0	2	14	5	1	21	22	0.2%
Selkirk	0	1	18	23	4	47	47	0.5%
Other Urban	8	43	307	218	25	593	600	6.6%
All Rural	78	285	1,142	592	72	2,091	2,169	23.9%
Total	108	463	3,520	4,186	808	8,977	9,085	100%

While traffic collisions occurring in urban locations account for the majority of victims overall, traffic collisions in rural locations account for the majority of victims killed and seriously injured. In 2008, 75% of all casualties resulted from traffic collisions occurring in urban areas. Traffic collisions occurring in rural locations, however, accounted for 67% of the victims killed and 57% of the victims seriously injured. In the previous five years (2003 to 2007) on average, 76% of all victims resulted from traffic collisions in urban locations while 72% of the victims killed and 62% of the victims seriously injured resulted from traffic collisions in rural locations.

Table 5-12 Vehicle Occupant Victims by Safety Equipment Use and Casualty Type

Table 5-12
Vehicle Occupant Victims by Safety Equipment Use and Casualty Type: 2008

Safety Equipment	2008 Casualty Type												2008 Total Victims	% of 2008 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Lap belt only installed - In use	2	2.9%	13	4.2%	140	5.2%	135	4.0%	10	1.5%	298	4.2%	300	4.2%
Lap belt only installed - Not in use	1	1.4%	6	1.9%	13	0.5%	6	0.2%	1	0.1%	26	0.4%	27	0.4%
Shoulder belt only installed - In use	0	-	6	1.9%	52	1.9%	49	1.4%	7	1.0%	114	1.6%	114	1.6%
Shoulder belt only installed - Not in use	2	2.9%	2	0.6%	20	0.7%	12	0.4%	1	0.1%	35	0.5%	37	0.5%
Lap and shoulder belt assembly - In use	21	30.4%	198	63.9%	2,049	76.5%	2,587	75.9%	160	23.9%	4,994	70.7%	5,015	70.3%
Combined belt installed - Not in use	16	23.2%	26	8.4%	76	2.8%	37	1.1%	3	0.4%	142	2.0%	158	2.2%
Only lap part of full assembly in use	0	-	0	-	1	<0.1%	2	<0.1%	0	-	3	<0.1%	3	<0.1%
Air bag deployed - Safety belt in use	1	1.4%	19	6.1%	120	4.5%	63	1.8%	6	0.9%	208	2.9%	209	2.9%
Air bag deployed - Safety belt not use	7	10.1%	6	1.9%	8	0.3%	3	<0.1%	0	-	17	0.2%	24	0.3%
Safety seat properly installed - In use	0	-	2	0.6%	25	0.9%	22	0.6%	0	-	49	0.7%	49	0.7%
Safety seat improperly installed - In use	0	-	0	-	1	<0.1%	0	-	0	-	1	<0.1%	1	<0.1%
Safety seat installed - Not in use	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Safety helmet worn	2	2.9%	2	0.6%	1	<0.1%	0	-	0	-	3	<0.1%	5	<0.1%
Safety helmet not worn	3	4.3%	1	0.3%	0	-	1	<0.1%	0	-	2	<0.1%	5	<0.1%
Reflective clothing or item on pedestrian	0	-	0	-	0	-	0	-	0	-	0	-	0	-
No safety device available	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Not Applicable	1	1.4%	2	0.6%	6	0.2%	9	0.3%	4	0.6%	21	0.3%	22	0.3%
Unknown	13	18.8%	27	8.7%	165	6.2%	482	14.1%	477	71.3%	1,151	16.3%	1,164	16.3%
Total	69	100%	310	100%	2,677	100%	3,408	100%	669	100%	7,064	100%	7,133	100%

Table 5-12a Victims by Safety Equipment Use and Casualty Type for Previous Five Years

Table 5-12a

Vehicle Occupant Victims by Safety Equipment Use and Casualty: 2003 to 2007

Safety Equipment	2003-2007 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Lap belt only installed - In use	1	14	134	145	6	299	300	3.7%
Lap belt only installed - Not in use	2	8	18	10	1	37	39	0.5%
Shoulder belt only installed - In use	2	9	93	78	4	183	185	2.3%
Shoulder belt only installed - Not in use	3	8	24	13	2	48	51	0.6%
Lap and shoulder belt assembly - In use	31	207	2,387	2,949	180	5,723	5,755	70.3%
Combined belt installed - Not in use	26	57	105	39	5	205	231	2.8%
Only lap part of full assembly in use	0	1	6	3	0	9	9	0.1%
Air bag deployed - Safety belt in use	3	14	110	42	5	170	174	2.1%
Air bag deployed - Safety belt not use	3	3	10	1	1	15	18	0.2%
Safety seat properly installed - In use	0	1	45	27	1	75	76	0.9%
Safety seat improperly installed - In use	0	0	3	1	0	4	4	<0.1%
Safety seat installed - Not in use	0	0	2	0	0	2	3	<0.1%
Safety helmet worn	1	2	4	1	0	8	8	0.1%
Safety helmet not worn	1	2	3	1	0	6	7	<0.1%
Reflective clothing or item on pedestrian	0	0	0	0	0	1	1	<0.1%
No safety device available	0	0	2	0	0	2	2	<0.1%
Not Applicable	4	13	53	180	4	250	253	3.1%
Unknown	11	38	152	403	463	1,056	1,067	13.0%
Total	89	376	3,151	3,895	672	8,093	8,182	100%

Most victims in traffic collisions were using safety equipment at the time of the collision (80% of all victims in 2008).

In 2008, 42% of the victims killed in traffic collisions and 13% of the victims seriously injured in traffic collisions were recorded as not wearing or using safety equipment at the time of the collision.

Table 5-13 Safety Equipment Effectiveness

Table 5-13

Safety Equipment Effectiveness - Ratio of Victims Killed and Injured While Using Safety Equipment to Not Using Safety Equipment: 2008

Safety Equipment Use	Total Casualties	Killed	% of Total Casualties	Serious Injury	% of Total Casualties	Minor/ Minimal Injury	% of Total Casualties	Other Injury	% of Total Casualties
Equipment <u>not</u> in use	251	29	11.6%	41	16.3%	176	70.1%	5	2.0%
Equipment in use	5,691	26	0.5%	240	4.2%	5,242	92.1%	183	3.2%
Safety Equipment Effectiveness*		25.29		3.87		0.76		0.62	

*Ratio of % not using equipment over the % using equipment.

As the number of victims in traffic collisions who use safety equipment (such as seatbelts, child restraints and helmets) exceeds the number of those who did not use safety equipment, one might conclude that using safety equipment contributes to more victims. However, a large majority of total drivers and passengers use safety equipment, and thus have a higher representation among collision victims.

When considering the effectiveness of safety equipment in a traffic collision, the total proportion of victims by casualty type who use safety equipment is compared to the proportion of victims by casualty type not using that equipment. In this manner, it is possible to determine the effectiveness of the equipment by examining how much more likely the victim is to sustain injuries of a specific severity when using or not using safety equipment.

As can be seen in Table 5-13, in 2008, victims not using safety equipment are more than 25 times more likely to be killed and nearly four times more likely to be seriously injured in a traffic collision than those who used the equipment.

Table 5-14 Vehicle Occupant Victim Ejections in Traffic Collision

Table 5-14
Vehicle Occupant Victims by Ejection From Vehicle and Casualty Type: 2008

Ejection	2008 Casualty Type												2008 Total Victims	% of 2008 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Not Ejected	46	66.7%	275	88.7%	2639	98.6%	3386	99.4%	666	99.6%	6966	98.6%	7012	98.3%
Fully Ejected	20	29.0%	31	10.0%	35	1.3%	19	0.6%	0	-	85	1.2%	105	1.5%
Partially Ejected	3	4.3%	4	1.3%	3	0.1%	3	<0.1%	3	0.4%	13	0.2%	16	0.2%
Total	69	100%	310	100%	2,677	100%	3,408	100%	669	100%	7,064	100%	7,133	100%

Table 5-14a Vehicle Occupant Victim Ejections in Traffic Collision for Previous Five Years

Table 5-14a

Vehicle Occupant Victims by Ejection From Vehicle and Casualty: 2003 to 2007

Ejection	2003-2007 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Not Ejected	60	321	3,089	3,869	668	7,947	8,007	97.9%
Fully Ejected	26	49	52	23	3	127	153	1.9%
Partially Ejected	4	6	9	2	1	19	22	0.3%
Total	89	376	3,151	3,895	672	8,093	8,182	100%

Most victims in traffic collisions are not ejected from the vehicle they are travelling in.

However, in 2008, victims ejected or partially ejected from a vehicle during a traffic collision are 29 times more likely to be killed and more than 7 times more likely to be seriously injured than if they were not ejected during the collision.

SECTION 6 – Pedestrian Victims



Introduction

This section calculates the number of pedestrian victims killed and injured in traffic collisions and examines the severity of the injury received by the pedestrian victim. Month, time and day of occurrences are examined and breaks are provided for the age of the pedestrian. The specific pedestrian actions taken immediately prior to the collision are also presented. Relative involvement of pedestrians in traffic collisions per 100,000 people in the general population is also calculated.

Key Highlights

In 2008, there were 439 pedestrian victims involved in traffic collisions. Of these:

- 15 were killed;
- 49 were seriously injured;
- 153 sustained minor injuries;
- 134 sustained minimal injuries; and
- 88 sustained injuries that are undefined in terms of severity.

The relative involvement (per 100,000 people in the general population) of pedestrians in traffic collisions in 2008 (36.6) has decreased by more than 2% compared to 2007 and by nearly 11% compared to the previous five years (2003 to 2007) on average. Pedestrian involvement in traffic collisions in 2008 where the pedestrian:

- Was killed (1.3 in 2008) has decreased 7% compared to 2007, but increased 6% compared to the previous five years; and,
- Was injured (35.4 in 2008) has decreased by 2% compared to 2007 and by 11% compared to the previous five years.

Three in ten pedestrians killed and injured in 2008 were under 20 years of age (30%) while half were between the ages of 20 and 54 (49%). Adults aged 55 to 64 make up 10% of pedestrian victims and those aged 65 and older make up 11%.

Pedestrian victims most frequently result from collisions occurring:

- In the late fall and winter months (including November through February) – 43% of all pedestrian victims; 33% of pedestrians killed and 43% of pedestrians injured;
- On weekdays, particularly Tuesday (19% of all victims), Thursday (18% of all victims) and Friday (18% of all victims); and,
- Between noon and 6 p.m. (12:00-14:59 – 17% of all victims; 15:00 to 17:59 – 24% of all victims).

Where the actions of the pedestrian immediately prior to the collision are known, most pedestrians injured and killed in a traffic collision in 2008 were:

- At an intersection, crossing with the right of way (35% of all pedestrian victims; 25% of those killed; 35% of those injured) or without the right of way (13% of all pedestrian victims; 8% of those killed; 13% of those injured);
- Between intersections, crossing the roadway (17% of all pedestrian victims; 8% of those killed; 17% of those injured); or,
- Running into the roadway (14% of all pedestrian victims; 8% of those killed; 14% of those injured).

Major Elements Examined

Counts of collisions in Manitoba for 2008 and previous years are taken from Traffic Accident Reports (TAR) completed by law enforcement agencies and compiled by Manitoba Public Insurance. These counts are presented for all reportable collisions, for fatal collisions, for injury collisions and for property damage only (PDO) collisions.

It is important to note that the number of pedestrian victims involved in traffic collisions is not equal to the number of collisions that occurred involving pedestrians as each collision can result in multiple victims.

The terms 'crash', 'collision' and 'accident' are used interchangeably in this report. The terms 'victims' and 'casualties' are used interchangeably in this report. The terms 'fatal' and 'killed' are used

interchangeably in this report.

The reader is strongly cautioned when interpreting results regarding pedestrian collisions of differing injury severity, including fatalities. Due to the small numbers of these types of collisions, fluctuations year-over-year could be dramatic; a small change in the total count of these types of collisions could have a significant effect on statistics such as percentage change to previous years and relative involvement rates.

The reader is cautioned that not all percentages and calculations in the following tables will add to 100% of the total noted. Rounding error will often produce a difference of one or two percent. Likewise, average calculations are presented for historical data from the years 2003 to 2007. Rounding error in these calculations will cause individual average counts not to add to total average counts in some cases.

Terms and Definitions

"Casualty Type"

- A classification of the severity of the injury sustained by a victim in a traffic collision, i.e., whether someone was killed or injured. This classification also includes a designation for the severity of each non-fatal (i.e., victims injured but not killed) injury sustained.

"Killed"

- The casualty type "killed" indicates the victim involved in the traffic collision died as a result of their injuries within thirty days of the collision occurrence.

"Injured"

- The casualty type "injured" indicates the victim sustained some level of personal injury, but in which they were not killed. Levels of injury include: 'serious' or 'major' (admitted to hospital); 'minor' (treated and released from hospital); and, 'minimal' (no hospital treatment required). 'Other' injury is noted when the severity of the victim's injuries is not known or recorded in the TAR.

"Collision severity"

- A classification of a collision based on the most severe result of the collision, i.e., whether someone was killed (fatal), injured (injury) or property damage only (PDO) occurred.

"Pedestrian Involvement Rate"

- A calculation of the number of pedestrians involved in traffic collisions for every 100,000 people in the general population in Manitoba. Population statistics are taken from the Provincial government and can be found at the following web address:
<http://www.gov.mb.ca/health/annstats/index.html>

"Pedestrian Action"

- Refers to the actions taken by a pedestrian immediately prior to a collision (including: crossing at an intersection with or without the right-of-way, crossing between intersections, running into the roadway, walking on the roadway, lying on the roadway, playing on the roadway, etc.).

Table 6-1 Ten Year Summary of Pedestrian Victims in Traffic Collisions

Table 6-1
Ten Year Summary of Pedestrian Victims in Traffic Collisions: 1999 to 2008

Year	Casualty Type												Total Victims	% change to previous year
	Killed	% change to previous year	Serious Injury	% change to previous year	Minor Injury	% change to previous year	Minimal Injury	% change to previous year	Other Injury	% change to previous year	Total Injured	% change to previous year		
1999	21	-	-	-	-	-	-	-	-	-	504	-	525	-
2000	15	-28.6%	-	-	-	-	-	-	-	-	484	-4.0%	499	-5.0%
2001	10	-33.3%	-	-	-	-	-	-	-	-	460	-5.0%	470	-5.8%
2002	14	40.0%	-	-	-	-	-	-	-	-	441	-4.1%	455	-3.2%
2003	13	-7.1%	51	-	207	-	192	-	59	-	511	15.9%	524	15.2%
2004	15	15.4%	57	11.8%	201	-2.9%	143	-25.5%	55	-6.8%	456	-10.8%	471	-10.1%
2005	11	-26.7%	36	-36.8%	174	-13.4%	153	7.0%	68	23.6%	434	-4.8%	445	-5.5%
2006	14	27.3%	71	97.2%	208	19.5%	141	-7.8%	84	23.5%	505	16.4%	519	16.6%
2007	16	14.3%	52	-26.8%	161	-22.6%	107	-24.1%	109	29.8%	429	-15.0%	445	-14.3%
2008	15	-6.3%	49	-5.8%	153	-5.0%	134	25.2%	88	-19.3%	424	-1.2%	439	-1.3%
2003-2007 Average*	14	4.6%	53	11.3%	190	-4.8%	147	-12.6%	75	17.5%	466	0.3%	480	0.4%

*The "% change to previous year" for "2003-2007 Average" is an average rate of change for the time period 2003 to 2007.

NOTE: A methodology change in how injury severity is reported has been implemented beginning in 2008. Historical figures were calculated for the years 2003 to 2007 for comparison purposes, but not for years prior to that time.

In 2008, there were 439 pedestrian victims involved in traffic collisions. Of these:

- 15 were killed;
- 49 were seriously injured;
- 153 sustained minor injuries;
- 134 sustained minimal injuries; and
- 88 sustained injuries that are unspecified in terms of severity.

The total number of pedestrian victims involved in traffic collisions in 2008 has decreased by 1% compared to 2007 and by nearly 9% compared to the previous five years (2003 to 2007) on average.

The number of pedestrians:

- Killed has decreased by a count of 1 compared to 2007 and increased by a count of 1 compared to the previous five years;
- Injured has decreased by 1% compared to 2007 and by 9% compared to the previous five years;
- Sustaining serious injuries has decreased by nearly 6% compared to 2007 and by nearly 8% compared to the previous five years;
- Sustaining minor injuries has decreased by nearly 5% compared to 2007 and by nearly 20% compared to the previous five years; and,
- Sustaining minimal injuries has increased by 25% compared to 2007 but decreased by 9% compared to the previous five years.

The number of pedestrians killed in traffic collisions over the past ten years has fluctuated, ranging from a high of 21 in 1999 to a low of ten in 2001. The 15 pedestrians killed in 2008 is only one more than the average number of pedestrians killed in each of the past five years (2003 to 2007 average pedestrians killed each year – 14).

Recognizing that counts of pedestrians involved in collisions could be impacted either positively or negatively by changing population statistics, relative involvement rates per 100,000 people in the general population in Manitoba is examined (see Table 6-2) to provide a standardized rate comparison. This accounts for changing population size instead of simply a raw count of the number of pedestrians involved overall.

Table 6-2 Ten Year Summary of Pedestrian Involvement Rate (per 100,000 people) in Traffic Collisions

Table 6-2
 Ten Year Summary of Pedestrian Involvement Rates (per 100,000 people) in Traffic Collisions: 1999 to 2008

Year	Casualty Type												Total Victims	% change to previous year
	Killed	% change to previous year	Serious Injury	% change to previous year	Minor Injury	% change to previous year	Minimal Injury	% change to previous year	Other Injury	% change to previous year	Total Injured	% change to previous year		
1999	1.8	-	-	-	-	-	-	-	-	-	44.0	-	45.9	-
2000	1.3	-28.9%	-	-	-	-	-	-	-	-	42.1	-4.4%	43.4	-5.4%
2001	0.9	-33.7%	-	-	-	-	-	-	-	-	39.8	-5.5%	40.6	-6.3%
2002	1.2	40.0%	-	-	-	-	-	-	-	-	38.1	-4.1%	39.4	-3.2%
2003	1.1	-7.4%	4.4	-	17.8	-	16.6	-	5.1	-	44.1	15.5%	45.2	14.8%
2004	1.3	14.4%	4.9	10.8%	17.2	-3.7%	12.2	-26.2%	4.7	-7.6%	39.0	-11.5%	40.3	-10.9%
2005	0.9	-26.9%	3.1	-37.1%	14.8	-13.7%	13.0	6.6%	5.8	23.2%	37.0	-5.2%	37.9	-5.9%
2006	1.2	26.8%	6.0	96.4%	17.7	19.1%	12.0	-8.2%	7.1	23.0%	42.9	15.9%	44.0	16.2%
2007	1.3	13.5%	4.4	-27.3%	13.6	-23.1%	9.0	-24.6%	9.2	28.9%	36.2	-15.6%	37.5	-14.8%
2008	1.3	-7.2%	4.1	-6.8%	12.8	-6.0%	11.2	23.9%	7.3	-20.1%	35.4	-2.2%	36.6	-2.4%
2003-2007 Average*	1.2	4.1%	4.5	10.7%	16.2	-5.4%	12.6	-13.1%	6.4	16.9%	39.8	-0.2%	41.0	-0.1%

*The "% change to previous year" for "2003-2007 Average" is an average rate of change for the time period 2003 to 2007.

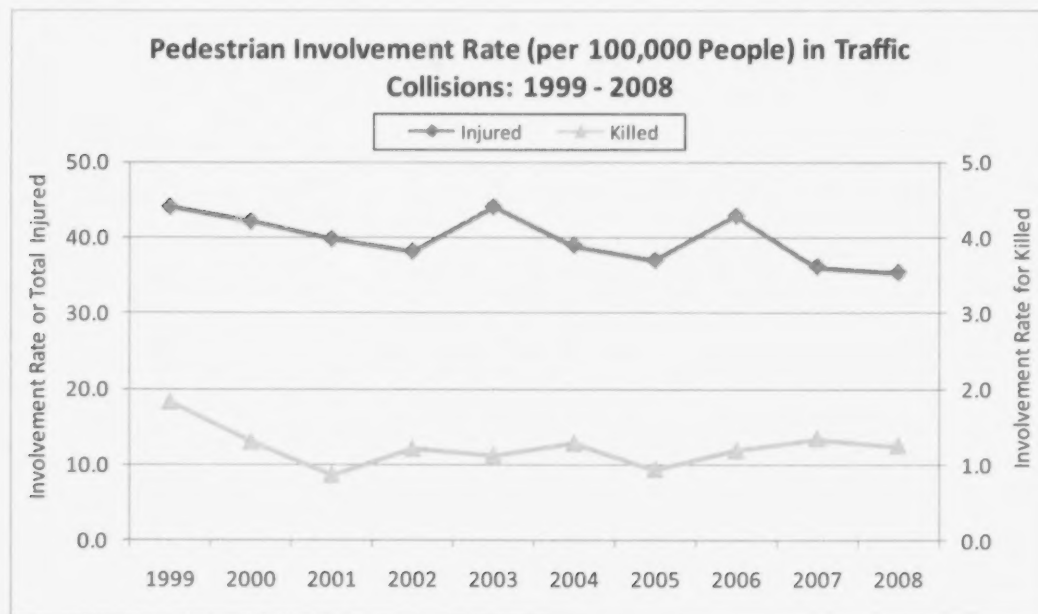
NOTE: A methodology change in how injury severity is reported has been implemented beginning in 2008. Historical figures were calculated for the years 2003 to 2007 for comparison purposes, but not for years prior to that time.

The relative involvement of pedestrians (per 100,000 people the general population) in traffic collisions in 2008 (36.6) has decreased by more than 2% compared to 2007 and by nearly 11% compared to the previous five years (2003 to 2007) on average.

Overall, pedestrian relative involvement in injury collisions has decreased, but their involvement in fatal collisions has increased compared to the recent five year trend. Pedestrian relative involvement in traffic collisions in 2008 where the pedestrian:

- Was killed (1.3 in 2008) has decreased 7% compared to 2007, but increased 6% compared to the previous five years;
- Was injured, including all levels of severity but excluding killed (35.4), has decreased by 2% compared to 2007 and by 11% compared to the previous five years;
- Sustained serious injuries (4.1 in 2008) has decreased by nearly 7% compared to 2007 and by 10% compared to the previous five years;
- Sustained minor injuries (12.8 in 2008) has decreased by 26% compared to 2007 and by 21% compared to the previous five years;
- Sustained minimal injuries (11.2 in 2008) has increased by 24% compared to 2007, but decreased by 11% compared to the previous five years; and,
- Sustained an unspecified injury (7.3 in 2008) has decreased by 20% compared to 2007 but increased by 15% compared to the previous five years.

Figure 6-1 Pedestrian Involvement Rate (per 100,000 People) in Traffic Collisions



Over the last 10 years (1999 to 2008), pedestrian injuries resulting from traffic collisions have generally declined. With the exception of 2003 and 2006, each year in the past ten has seen a decrease in the pedestrian involvement rate. The year 2008 represents the lowest pedestrian involvement rate for injuries recorded in the past ten years.

Over this same time frame, the involvement rate for pedestrians killed in traffic collisions has fluctuated. The involvement rate in 2008, while down from 2007 and from 1999, is slightly higher than the average rate since 2002.

Table 6-3 Pedestrian Victims by Month of Occurrence and Casualty Type

Table 6-3
Total Pedestrian Victims by Month of Occurrence and Casualty Type: 2008

Month of Occurrence	2008 Casualty Type												2008 Total Victims	% of 2008 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
January	0	-	5	10.2%	16	10.5%	6	4.5%	10	11.4%	37	8.7%	37	8.4%
February	2	13.3%	6	12.2%	16	10.5%	11	8.2%	14	15.9%	47	11.1%	49	11.2%
March	0	-	6	12.2%	6	3.9%	10	7.5%	6	6.8%	28	6.6%	28	6.4%
April	2	13.3%	2	4.1%	9	5.9%	10	7.5%	2	2.3%	23	5.4%	25	5.7%
May	0	-	4	8.2%	11	7.2%	7	5.2%	5	5.7%	27	6.4%	27	6.2%
June	3	20.0%	6	12.2%	11	7.2%	8	6.0%	5	5.7%	30	7.1%	33	7.5%
July	1	6.7%	2	4.1%	13	8.5%	9	6.7%	5	5.7%	29	6.8%	30	6.8%
August	1	6.7%	4	8.2%	6	3.9%	14	10.4%	10	11.4%	34	8.0%	35	8.0%
September	2	13.3%	2	4.1%	11	7.2%	8	6.0%	12	13.6%	33	7.8%	35	8.0%
October	1	6.7%	4	8.2%	13	8.5%	13	9.7%	6	6.8%	36	8.5%	37	8.4%
November	2	13.3%	6	12.2%	24	15.7%	20	14.9%	5	5.7%	55	13.0%	57	13.0%
December	1	6.7%	2	4.1%	17	11.1%	18	13.4%	8	9.1%	45	10.6%	46	10.5%
Total	15	100%	49	100%	153	100%	134	100%	88	100%	424	100%	439	100%

Table 6-3a Pedestrian Victims by Month of Occurrence and Casualty Type for Previous Five Years

Table 6-3a
 Pedestrian Victims by Month of Occurrence and Casualty Type: 2003 to 2007

Month of Occurrence	2003-2007 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
January	1	5	17	13	6	42	43	8.9%
February	1	5	17	15	7	44	45	9.4%
March	1	4	21	13	6	44	44	9.3%
April	0	4	15	12	7	38	38	8.0%
May	1	5	15	11	5	36	37	7.7%
June	1	3	17	13	8	40	42	8.7%
July	1	4	13	10	4	31	31	6.5%
August	2	4	14	9	5	31	33	7.0%
September	1	4	15	13	5	37	38	8.0%
October	2	6	18	15	7	46	48	10.0%
November	2	5	15	14	8	43	44	9.3%
December	1	4	12	10	7	34	35	7.3%
Total	14	53	190	147	75	466	480	100%

Pedestrians are killed and injured in collisions most frequently in the late fall and winter months. In 2008, 43% of all pedestrian victims were involved in traffic collisions from November through February, inclusive. This is a slightly higher proportion than in recent years. During the previous five years (2003 to 2007) on average, 35% of pedestrian victims were involved in traffic collisions from November through February, inclusive.

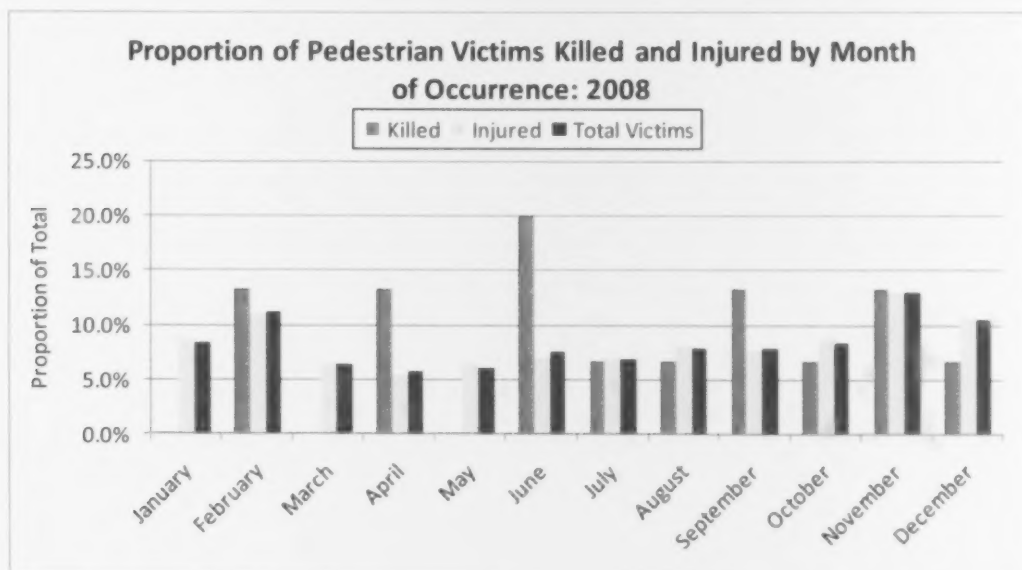
Figure 6-2 Proportion of Pedestrian Victims Killed and Injured by Month of Occurrence

Table 6-4 Total Pedestrian Victims by Day of Occurrence and Casualty Type

Table 6-4
Total Pedestrian Victims by Day of Occurrence and Casualty Type: 2008

Day of the Week	2008 Casualty Type												2008 Total Victims	% 2008 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Sunday	1	6.7%	2	4.1%	14	9.2%	10	7.5%	7	8.0%	33	7.8%	34	7.7%
Monday	1	6.7%	8	16.3%	26	17.0%	22	16.4%	10	11.4%	66	15.6%	67	15.3%
Tuesday	1	6.7%	9	18.4%	33	21.6%	21	15.7%	19	21.6%	82	19.3%	83	18.9%
Wednesday	5	33.3%	7	14.3%	22	14.4%	20	14.9%	7	8.0%	56	13.2%	61	13.9%
Thursday	1	6.7%	10	20.4%	24	15.7%	23	17.2%	22	25.0%	79	18.6%	80	18.2%
Friday	5	33.3%	6	12.2%	20	13.1%	27	20.1%	21	23.9%	74	17.5%	79	18.0%
Saturday	1	6.7%	7	14.3%	14	9.2%	11	8.2%	2	2.3%	34	8.0%	35	8.0%
Total	15	100%	49	100%	153	100%	134	100%	88	100%	424	100%	439	100%

Table 6-4a Pedestrian Victims by Day of Occurrence and Casualty Type for Previous Five Years

Table 6-4a
 Pedestrian Victims by Day of Occurrence and Casualty Type: 2003 to 2007

Day of the Week	2003-2007 Average Count of Victims							% of Total Victims
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	
Sunday	2	6	13	10	5	34	36	7.6%
Monday	2	4	27	27	11	70	72	14.9%
Tuesday	2	10	30	22	13	74	76	15.8%
Wednesday	2	7	33	21	11	72	74	15.5%
Thursday	2	6	31	26	12	74	76	15.9%
Friday	2	9	35	25	14	83	85	17.8%
Saturday	2	11	21	16	11	58	60	12.5%
Total	14	53	190	147	75	466	480	100%

Pedestrians are killed and injured in collisions most frequently on weekdays. In 2008, more pedestrians were involved in traffic collisions on Tuesday (19% of all victims), Thursday (18% of all victims) and Friday (18% of all victims) than any other day of the week. Over the previous five years (2003 to 2007) on average, Friday has accounted for 18% of all pedestrian victims in traffic collisions.

Friday is the most likely day for a pedestrian to be killed in a traffic collision; this is true both in 2008 and in the previous five years on average. In 2008, Wednesday accounted for an equal number of pedestrian deaths to Friday.

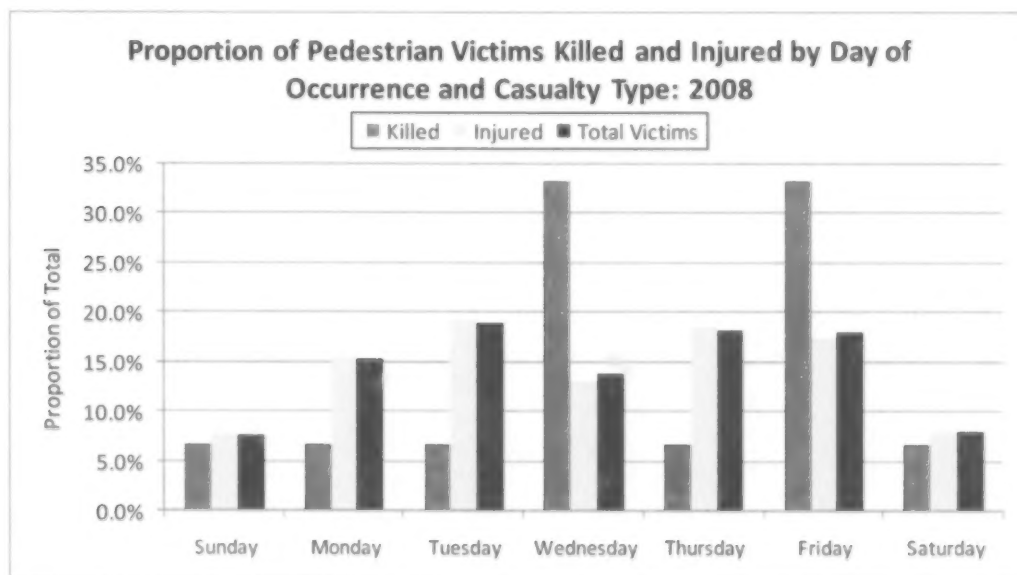
Figure 6-3 Proportion of Pedestrian Victims Killed and Injured by Day of Occurrence

Table 6-5 Total Pedestrian Victims by Time of Occurrence and Casualty Type

Table 6-5
Total Pedestrian Victims by Time of Occurrence and Casualty Type: 2008

Time of the Day	2008 Casualty Type												2008 Total Victims	% of 2008 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
00:00 - 02:59	0	-	3	6.1%	4	2.6%	4	3.0%	0	-	11	2.6%	11	2.5%
03:00 - 05:59	2	13.3%	3	6.1%	2	1.3%	2	1.5%	0	-	7	1.7%	9	2.1%
06:00 - 08:59	1	6.7%	3	6.1%	17	11.1%	19	14.2%	14	15.9%	53	12.5%	54	12.3%
09:00 - 11:59	1	6.7%	4	8.2%	11	7.2%	19	14.2%	12	13.6%	46	10.8%	47	10.7%
12:00 - 14:59	2	13.3%	7	14.3%	28	18.3%	18	13.4%	20	22.7%	73	17.2%	75	17.1%
15:00 - 17:59	3	20.0%	18	36.7%	34	22.2%	33	24.6%	19	21.6%	104	24.5%	107	24.4%
18:00 - 20:59	2	13.3%	6	12.2%	29	19.0%	15	11.2%	7	8.0%	57	13.4%	59	13.4%
21:00 - 23:59	4	26.7%	2	4.1%	12	7.8%	12	9.0%	9	10.2%	35	8.3%	39	8.9%
Not Stated	0	-	3	6.1%	16	10.5%	12	9.0%	7	8.0%	38	9.0%	38	8.7%
Total	15	100%	49	100%	153	100%	134	100%	88	100%	424	100%	439	100%

Table 6-5a Pedestrian Victims by Time of Occurrence and Casualty Type for the Previous Five YearsTable 6-5a
Pedestrian Victims by Time of Occurrence and Casualty: 2003 to 2007

Time of the Day	2003-2007 Average Count of Victims							% of Total Victims
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	
00:00 - 02:59	2	4	7	5	2	17	18	3.8%
03:00 - 05:59	1	2	4	2	1	8	10	2.0%
06:00 - 08:59	1	4	17	12	6	40	41	8.5%
09:00 - 11:59	1	5	23	15	8	51	52	10.8%
12:00 - 14:59	2	9	32	27	12	80	82	17.0%
15:00 - 17:59	2	10	46	41	21	118	119	24.9%
18:00 - 20:59	3	9	25	18	14	66	69	14.3%
21:00 - 23:59	2	6	18	12	5	41	43	8.9%
Not Stated	1	5	18	16	7	45	46	9.6%
Total	14	53	190	147	75	466	480	100%

Pedestrians are most often killed and injured in traffic collisions occurring between noon and 6 p.m. In 2008, 17% of all pedestrian victims were involved in traffic collisions between 12:00-14:59 while another 25% were involved in traffic collisions between 15:00 to 17:59. This is consistent with the previous five years (2003 to 2007) on average (12:00-14:59 – 17% of all victims; 15:00 to 17:59 – 25% of all victims).

More pedestrians are killed between 6 p.m. and midnight than at any other time of the day. In 2008, 40% of pedestrians (6 of 15) were killed between 6 p.m. and midnight. In the previous five years (2003 to 2007) on average, 35% of pedestrians (5 of 14) were killed between 6 p.m. and midnight.

Figure 6-4 Proportion of Pedestrian Victims Killed and Injured by Time of Occurrence

Section 6

Pedestrian Victims

Table 6-6 Total Pedestrian Victims by Age Group and Casualty TypeTable 6-6
Total Pedestrian Victims by Age Group and Casualty Type: 2008

Age Group	2008 Casualty Type												2008 Total Victims	% of 2008 Total Victims*
	Killed	% of Total Killed*	Serious Injury	% of Total Serious Injury*	Minor Injury	% of Total Minor Injury*	Minimal Injury	% of Total Minimal Injury*	Other Injury	% of Total Other Injury*	Total Injured	% of Total Injured*		
0-4	0	-	2	4.4%	8	5.8%	2	4.9%	0	-	12	5.0%	12	4.8%
5-9	1	7.7%	0	-	10	7.3%	1	2.4%	1	6.7%	12	5.0%	13	5.2%
10-14	0	-	5	11.1%	9	6.6%	4	9.8%	3	20.0%	21	8.8%	21	8.4%
15-19	0	-	4	8.9%	21	15.3%	4	9.8%	2	13.3%	31	13.0%	31	12.4%
20-24	2	15.4%	6	13.3%	13	9.5%	4	9.8%	2	13.3%	25	10.5%	27	10.8%
25-34	0	-	4	8.9%	22	16.1%	4	9.8%	1	6.7%	31	13.0%	31	12.4%
35-44	1	7.7%	5	11.1%	7	5.1%	8	19.5%	1	6.7%	21	8.8%	22	8.8%
45-54	4	30.8%	3	6.7%	24	17.5%	10	24.4%	2	13.3%	39	16.4%	43	17.1%
55-64	2	15.4%	7	15.6%	11	8.0%	3	7.3%	1	6.7%	22	9.2%	24	9.6%
65+	3	23.1%	9	20.0%	12	8.8%	1	2.4%	2	13.3%	24	10.1%	27	10.8%
Not Stated	2	-	4	-	16	-	93	-	73	-	186	-	188	-
Total	15	100%	49	100%	153	100%	134	100%	88	100%	424	100%	439	100%

*Percentage of the total does not include the "not stated" category.

Table 6-6a Pedestrian Victims by Age and Casualty Type for Previous Five Years

Table 6-6a
Pedestrian Victims by Age Group and Casualty Type: 2003 to 2007

Age Group	2003-2007 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims*
0-4	1	1	5	1	0	7	9	2.7%
5-9	0	4	18	3	2	27	27	8.6%
10-14	0	4	25	5	2	36	36	11.6%
15-19	1	5	23	6	1	35	36	11.6%
20-24	1	4	15	8	2	29	30	9.6%
25-34	2	8	21	9	2	39	41	13.0%
35-44	2	8	20	10	2	40	42	13.4%
45-54	1	6	19	5	2	32	33	10.5%
55-64	0	3	14	4	1	22	22	7.0%
65+	3	8	18	5	2	34	37	11.9%
Not Stated	2	3	12	91	59	165	167	-
Total	14	53	190	147	75	466	480	100%

*Percentage of the total does not include the "not stated" category.

Adults aged 45 to 54 account for the highest proportion of pedestrian victims in 2008 (17% of all pedestrian victims; 31% of victims killed; 16% of victims injured).

- Half of the pedestrians injured in 2008 were between the ages of 20 and 54 (49%).
- Three in ten pedestrians injured (30%) were under 20 years of age (less than age 10 – 10%; age 10 to 14 8%; age 15-19 12%).
- Adults aged 55 to 64 make up 10% of pedestrian victims.
- Adults aged 65 and older make up 11% of pedestrian victims.

Most pedestrians killed in traffic collisions in 2008 were adults aged 45 or older (9 of 15 victims).

Compared to the previous five year period (2003 to 2007) on average, there were fewer pedestrian victims of traffic collisions in the younger age groups in 2008. Over the previous five years, 35% of pedestrian victims were under the age of 20, including 11% under age 10 and 23% aged 10 to 19.

Table 6-7 Pedestrian Involvement Rate (per 100,000 People) in Traffic Collisions by Age Group

Table 6-7

Pedestrian Involvement Rate (per 100,000 People in Traffic Collisions by Age Group: 2008, 2003-2007 Average)

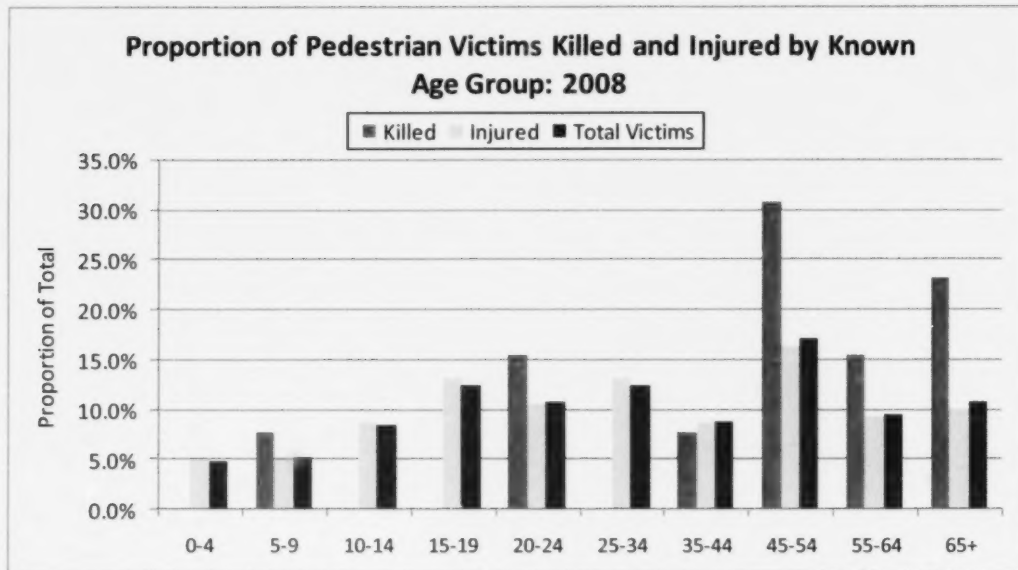
Year	2008 Casualty Type						2008 Total Victims	2003-2007 Average Involvement		
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured		Killed	Injured	Total Victims
0-4	0.0	2.7	10.7	2.7	0.0	16.1	16.1	1.7	10.3	12.0
5-9	1.3	0.0	13.4	1.3	1.3	16.0	17.4	0.3	34.8	35.0
10-14	0.0	6.1	10.9	4.9	3.6	25.5	25.5	0.5	42.2	42.7
15-19	0.0	4.6	24.1	4.6	2.3	35.6	35.6	1.2	41.5	42.7
20-24	2.4	7.3	15.9	4.9	2.4	30.5	33.0	1.8	36.1	37.8
25-34	0.0	2.6	14.3	2.6	0.6	20.1	20.1	1.1	25.9	26.9
35-44	0.6	3.1	4.3	4.9	0.6	12.8	13.4	1.2	23.3	24.4
45-54	2.2	1.7	13.3	5.5	1.1	21.6	23.8	0.6	18.6	19.2
55-64	1.5	5.2	8.1	2.2	0.7	16.3	17.8	0.2	18.0	18.1
65+	1.8	5.5	7.3	0.6	1.2	14.6	16.4	4.0	42.6	46.6

Younger pedestrians, although they account for a smaller proportion of the overall number of pedestrian victims, tend to have a higher rate of involvement in traffic collisions. Manitobans aged 15 to 19 have the highest pedestrian involvement rate (per 100,000 people) in traffic collisions at 35.6. This is only slightly ahead of Manitobans aged 20 to 24, whose involvement rate is 33.0.

On average, the pedestrian involvement rate for younger Manitobans has dropped dramatically in 2008 compared to the previous five year period (2003 to 2007). The rates of involvement in 2008 for those:

- Aged under 10 is 16.1 – 33% lower than the previous five year average;
- Aged 10 to 14 is 25.5 – 40% lower than the previous five year average; and,
- Aged 15 to 19 is 35.6 – 17% lower than the previous five year average.

The pedestrian relative rate of involvement for Manitobans aged 65 and older has also dropped dramatically in 2008 compared to the previous five year period (2003 to 2007) on average. In 2008, the rate of involvement for adults aged 65 and older is 14.6, 69% lower than the average over the previous five years.

Figure 6-5 Proportion of Pedestrian Victims Killed and Injured by Age Group

Section 6

Pedestrian Victims

Table 6-8 Pedestrian Action and Casualty Type

Table 6-8
Pedestrian Action and Casualty Type: 2008

Pedestrian Action	2008 Casualty Type												2008 Total Victims	% of 2008 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
At Intersection, crossing with right-of-way	3	25.0%	12	32.4%	39	36.8%	30	35.7%	15	33.3%	96	35.3%	99	34.9%
At Intersection, crossing without right-of-way	1	8.3%	3	8.1%	14	13.2%	13	15.5%	6	13.3%	36	13.2%	37	13.0%
At Intersection, crossing, no traffic control	0	-	2	5.4%	1	0.9%	4	4.8%	1	2.2%	8	2.9%	8	2.8%
Between Intersections, crossing roadway	1	8.3%	4	10.8%	17	16.0%	19	22.6%	7	15.6%	47	17.3%	48	16.9%
Walking along roadway against traffic	0	-	0	-	1	0.9%	0	-	0	-	1	0.4%	1	0.4%
Walking along roadway with traffic	0	-	2	5.4%	5	4.7%	2	2.4%	2	4.4%	11	4.0%	11	3.9%
On Sidewalk/Median/Safety Zone	0	-	0	-	0	-	3	3.6%	1	2.2%	4	1.5%	4	1.4%
Walking on roadway (travelled portion)	0	-	1	2.7%	4	3.8%	3	3.6%	0	-	8	2.9%	8	2.8%
From behind Vehicle/Object on roadside	0	-	0	-	6	5.7%	2	2.4%	2	4.4%	10	3.7%	10	3.5%
Running into roadway	1	8.3%	9	24.3%	14	13.2%	6	7.1%	9	20.0%	38	14.0%	39	13.7%
Getting on/off another vehicle	1	8.3%	0	-	1	0.9%	2	2.4%	1	2.2%	4	1.5%	5	1.8%
Pushing/Working on vehicle	0	-	1	2.7%	0	-	0	-	0	-	1	0.4%	1	0.4%
Playing on roadway	0	-	0	-	2	1.9%	0	-	0	-	2	0.7%	2	0.7%
Working on roadway	0	-	1	2.7%	2	1.9%	0	-	1	2.2%	4	1.5%	4	1.4%
Lying in roadway	5	41.7%	2	5.4%	0	-	0	-	0	-	2	0.7%	7	2.5%
Unknown	3	-	12	-	47	-	50	-	43	-	152	-	155	-
Total*	15	100%	49	100%	153	100%	134	100%	88	100%	424	100%	439	100%

*Percentage of the total has been rebased to exclude the "unknown" category.

Table 6-8a Pedestrian Action and Casualty Type for the Previous Five Years

Table 6-8a
Pedestrian Action and Casualty Type: 2003 to 2007

Pedestrian Action	2003-2007 Average Count of Victims							% of Total Victims
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	
At Intersection, crossing with right-of-way	1	9	43	29	9	89	90	29.3%
At Intersection, crossing without right-of-way	1	4	14	7	4	30	30	9.9%
At Intersection, crossing, no traffic control	1	1	5	1	2	10	11	3.7%
Between Intersections, crossing roadway	2	7	22	15	7	52	53	17.3%
Walking along roadway against traffic	0	1	1	2	0	4	4	1.2%
Walking along roadway with traffic	1	2	3	3	1	8	9	2.9%
On Sidewalk/Median/Safety Zone	0	1	7	5	2	14	15	4.8%
Walking on roadway (travelled portion)	1	3	8	7	2	19	20	6.6%
From behind Vehicle/Object on roadside	0	1	7	5	1	14	15	4.8%
Running into roadway	1	4	23	12	6	45	45	14.8%
Getting on/off another vehicle	0	1	1	1	0	3	3	1.0%
Pushing/Working on vehicle	0	1	1	1	0	2	2	0.7%
Playing on roadway	0	0	2	1	0	3	4	1.2%
Working on roadway	0	0	2	1	0	3	3	1.0%
Lying in roadway	1	0	0	0	0	1	2	0.7%
Unknown	4	19	51	59	40	169	173	-
Total	14	54	190	147	75	466	480	100%

Where the actions of the pedestrian immediately prior to the collision are known, most pedestrians killed or injured in a traffic collision in 2008 were:

- At an intersection, crossing with the right of way (35% of all pedestrian victims; 25% of those killed; 35% of those injured) or crossing without the right of way (13% of all pedestrian victims; 8% of those killed; 13% of those injured);
- Between intersections, crossing the roadway (17% of all pedestrian victims; 8% of those killed; 17% of those injured); or,
- Running into the roadway (14% of all pedestrian victims; 8% of those killed; 14% of those injured).

Pedestrian actions immediately prior to the traffic collision in 2008 are not dramatically different than the actions recorded in the previous five year period (2003 to 2007) on average.

SECTION 7 – Vehicle Involvement





Introduction

This section calculates the number of vehicles involved in traffic collisions. Vehicle involvement in a collision is counted for each vehicle type (such as automobiles, vans, pick-up trucks, types of emergency vehicles). Vehicles involved in collisions that were, or were not, transporting hazardous loads and the nature of these loads is also indicated.

Key Highlights

In 2008, there were 44,692 vehicles involved in traffic collisions. Of these:

- 141 were involved in fatal collisions;
- 10,625 were involved in injury collisions; and,
- 34,286 were involved in PDO collisions.

Relative involvement of vehicles in traffic collisions per 10,000 registered vehicles has decreased in 2008 compared to 2007 and to the previous five year period (2003 to 2007) on average. Relative involvement of vehicles in traffic collisions in 2008 for:

- Total collisions is 577.7; down 10% from 2007 and nearly 22% from the previous five years;
- Fatal collisions is 1.8; down nearly 3% from 2007 and nearly 5% from the previous five years;
- Injury collisions is 132.7; down 10% from 2007 and nearly 18% from the previous five years; and,
- PDO collisions is 443.2; down 10% from 2007 and nearly 23% from the previous five years.

Light duty vehicles, including passenger vehicles, minivans and light trucks, represent 90% of the vehicles involved in all traffic collisions in 2008, relatively unchanged from the previous five years (2003 to 2007) on average (92%). Commercial trucks represent 8% of the vehicles involved, public service (PSV) vehicles represent about 1% and motorcycles, scooters and mopeds represent about half of one percent.

Major Elements Examined

Counts of vehicles involved in collisions in Manitoba for 2008 and previous years are taken from Traffic Accident Reports (TAR) completed by law enforcement agencies and compiled by Manitoba Public Insurance. These counts are presented for all reportable collisions, for fatal collisions, for injury collisions and for property damage only (PDO) collisions.

It is important to note that the number of collisions is not equal to the number of vehicles involved in those collisions. All collisions reported involve at least one vehicle, but may involve more than one as well.

When comparing historical results of relative involvement rates per 10,000 registered vehicles, the reader is cautioned to note that data from 1999 to 2001 used a different methodology when counting the population of registered vehicles than has been recently implemented for this report. It should be noted that calculations in these years is not directly comparable to the calculations for 2002 to 2008.

The reader is cautioned that not all percentages and calculations in the following tables will add to 100% of the total noted. Rounding error will often produce a difference of one or two percentage points. Likewise, average calculations are presented for historical data from the years 2003 to 2007. Rounding error in these calculations will cause individual average counts not to add to total average counts in some cases.

The reader is also cautioned when interpreting results regarding fatal collisions. Due to the small number of these types of collisions, fluctuations year-over-year could be dramatic; a small change in the total count of these types of collisions could have a significant effect on statistics such as percentage change to previous years and relative involvement rates.

Terms and Definitions**"Vehicles"**

- The number of vehicles involved in collisions. It excludes pedestrians, but includes automobiles, trucks, vans, buses, mobility vehicles, motorcycles, scooters, mopeds, bicycles, off-road vehicles, farm and construction equipment, and trains.

"Collision severity"

- A classification of a collision based on the most severe result of the collision, i.e., whether someone was killed (fatal), injured (injury) or property damage only (PDO) occurred.

"Fatal Collision"

- A motor vehicle collision in which at least one person is killed as a result of the collision. The death must have occurred within thirty days of the collision occurrence.

"Injury Collision"

- A motor vehicle collision in which at least one person has been recorded as sustaining some level of personal injury, but in which no one is fatally injured or killed. Levels of injury include: 'major' (admitted to hospital); 'minor' (treated and released from hospital); and, 'minimal' (no hospital treatment required).

"Property Damage Only (PDO) Collision"

- A motor vehicle collision in which no injury or fatality is sustained and only property damage is the result.

"Vehicle Involvement Rate"

- A calculation of the number of vehicles involved in traffic collisions for every 10,000 vehicles registered in Manitoba. The total number of vehicles registered is based on a point-in-time observation of the number of vehicles registered in specific vehicle classes. More detail regarding the methodology used to count registered vehicles can be found in "*Section 3 Vehicle Registrations*" of this report.

"Light Duty Vehicles"

- A classification of vehicle types including those defined in the Traffic Accident Report (TAR) as: passenger vehicles (automobile), mini/multi-purpose van, van under 4500 kg and pick-up under 4500 kg.

"NSC Commercial Vehicles"

- The National Safety Code (NSC) classification of vehicles is a classification of vehicle types including those defined in the Traffic Accident Report (TAR) as: "Truck greater than 4500 kilograms (unit chassis)", "Power Unit for Semi-Trailer", "Truck (Other)" (where the type and size of truck is unknown), "School Bus", "Transit Bus (Urban)", "Inter-City Bus", and "Bus (Other)". These vehicles bear a National Safety Code Number and are entered onto the National Safety Code Collision Monitoring Report.

"PSV Vehicles"

- Also known as 'public service vehicles', a classification of vehicle types including those defined in the Traffic Accident Report (TAR) as: "Other school vehicle", and "Emergency vehicles", including ambulance, fire and police vehicles.

Table 7-1 Ten Year Summary of Vehicles Involved in Traffic Collisions

Table 7-1
Ten Year Summary of Vehicles Involved in Traffic Collisions: 1999 to 2008

Year	Collision Severity						Total Collisions	% change to previous year
	Fatal	% change to previous year	Injury	% change to previous year	PDO	% change to previous year		
1999	157	-	12,543	-	35,757	-	48,457	-
2000	140	-10.8%	12,362	-1.4%	40,308	12.7%	52,810	9.0%
2001	138	-1.4%	11,770	-4.8%	39,215	-2.7%	51,123	-3.2%
2002	156	13.0%	12,384	5.2%	40,289	2.7%	52,829	3.3%
2003	142	-9.0%	12,771	3.1%	44,466	10.4%	57,379	8.6%
2004	131	-7.7%	12,117	-5.1%	45,093	1.4%	57,341	-0.1%
2005	135	3.1%	11,518	-4.9%	42,780	-5.1%	54,433	-5.1%
2006	151	11.9%	11,340	-1.5%	40,198	-6.0%	51,689	-5.0%
2007	141	-6.6%	11,118	-2.0%	37,301	-7.2%	48,560	-6.1%
2008	141	0.0%	10,265	-7.7%	34,286	-8.1%	44,692	-8.0%
2003-2007 Average*	140	-1.7%	11,773	-2.1%	41,968	-1.3%	53,880	-1.5%

* The "% change to previous year" for "2003-2007 Average" is an average rate of change for the time period 2003 to 2007.

In 2008, there were 44,692 vehicles involved in traffic collisions. Of these:

- 141 were involved in fatal collisions;
- 10,625 were involved in injury collisions; and,
- 34,286 were involved in PDO collisions.

Overall, there were 8% fewer vehicles involved in traffic collisions in 2008 compared to 2007 and 17% fewer than in the previous five year period (2003 to 2007) on average. These decreases in total vehicles involved are driven by fewer vehicles being involved in injury and PDO collisions. In 2008, there were:

- An equal number of vehicles involved in fatal collisions as in 2007, 1 more than in the previous five year period;
- Nearly 8% fewer vehicles involved in injury collisions compared to 2007, 13% fewer than in the previous five years; and,
- Eight percent fewer vehicles involved in PDO collisions compared to 2007, 18% fewer than in the previous five years.

Table 7-2 Summary of Vehicle Involvement Rate (per 10,000 Registered Vehicles) in Traffic Collisions**Table 7-2**
Ten Year Summary of Vehicle Involvement Rate (per 10,000 Registered Vehicles) in Traffic Collisions: 2002 to 2008

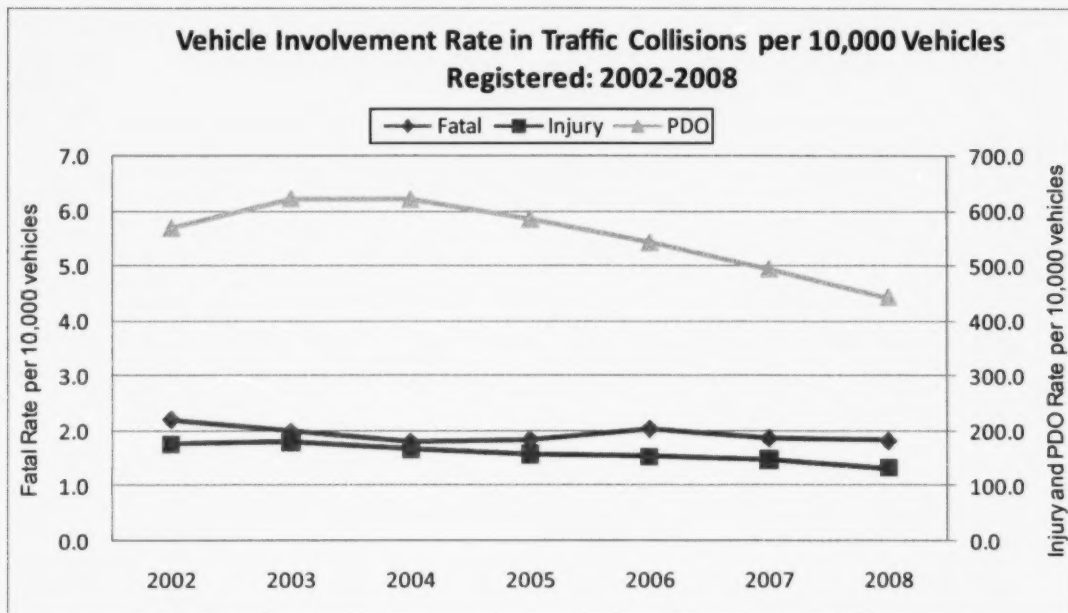
Year	Collision Severity						Total Collisions	% change to previous year
	Fatal	% change to previous year	Injury	% change to previous year	PDO	% change to previous year		
2002	2.2	-	175.0	-	569.2	-	746.4	-
2003	2.0	-9.8%	178.8	2.2%	622.6	9.4%	803.4	7.6%
2004	1.8	-9.2%	167.0	-6.6%	621.5	-0.2%	790.3	-1.6%
2005	1.8	2.3%	157.6	-5.6%	585.4	-5.8%	744.8	-5.8%
2006	2.0	10.4%	153.1	-2.8%	542.7	-7.3%	697.9	-6.3%
2007	1.9	-8.2%	147.5	-3.7%	494.9	-8.8%	644.3	-7.7%
2008	1.8	-2.6%	132.7	-10.0%	443.2	-10.4%	577.7	-10.3%
2003-2007 Average*	1.9	-2.9%	160.8	-3.3%	573.4	-2.5%	736.1	-2.7%

* The "% change to previous year" for "2003-2007 Average" is an average rate of change for the time period 2003 to 2007.

Relative involvement of vehicles in traffic collisions per 10,000 registered vehicles has decreased in 2008 compared to 2007 and to the previous five year period (2003 to 2007) on average. Relative involvement of vehicles in traffic collisions in 2008 for:

- Total collisions is 577.7; down 10% from 2007 and nearly 22% from the previous five years;
- Fatal collisions is 1.8; down nearly 3% from 2007 and nearly 5% from the previous five years;
- Injury collisions is 132.7; down 10% from 2007 and nearly 18% from the previous five years; and,
- PDO collisions is 443.2; down 10% from 2007 and nearly 23% from the previous five years.

Figure 7-1 Vehicle Involvement Rate (per 10,000 Registered Vehicles) in Fatal, Injury and PDO Collisions



As can be seen in Figure 7-1, the downward trend in relative rate of involvement for vehicles in PDO collisions has continued since 2004. This is also somewhat the case for the relative rate of involvement of vehicles in injury collisions, which has been steadily declining since 2003. However, the relative rate of involvement for vehicles in fatal collisions, although down in 2008 from 2007 and 2006, had increased in 2006 compared to the two previous years.

Table 7-3 Vehicle Types (as Defined in TAR) Involved in Traffic Collisions and Collision Severity

Table 7-3

Vehicle Types (as Defined in TAR) Involved in Traffic Collisions and Collision Severity: 2008, 2003-2007 Average

Vehicle Type	2008 Collision Severity						2008 Total	% of 2008 Total	2003-2007 Average Count of Collisions				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
Passenger vehicle (automobile)	61	43.3%	6,331	61.7%	21,531	62.8%	27,923	62.5%	61	7,545	26,517	34,123	63.3%
Mini/Multi-Purpose Van	9	6.4%	1,199	11.7%	3,880	11.3%	5,088	11.4%	14	1,286	4,729	6,030	11.2%
Van under 4500 kg	2	1.4%	122	1.2%	464	1.4%	588	1.3%	2	161	631	795	1.5%
Pick-up under 4500 kg	27	19.1%	1,262	12.3%	5,142	15.0%	6,431	14.4%	31	1,394	6,540	7,965	14.8%
Truck over 4500 kg (unit chassis)	3	2.1%	113	1.1%	402	1.2%	518	1.2%	4	136	510	650	1.2%
Power Unit for Semi-Trailer	11	7.8%	106	1.0%	367	1.1%	484	1.1%	12	138	456	606	1.1%
Truck/Camper	0	-	9	<0.1%	26	<0.1%	35	<0.1%	0	7	36	42	<0.1%
Motor home	0	-	3	<0.1%	7	<0.1%	10	<0.1%	0	2	18	20	<0.1%
Truck (other)	6	4.3%	635	6.2%	2,063	6.0%	2,704	6.1%	7	563	2,053	2,623	4.9%
School Bus	0	-	8	<0.1%	61	0.2%	69	0.2%	0	10	58	69	0.1%
Other School Vehicle	0	-	1	<0.1%	0	-	1	<0.1%	0	0	1	1	<0.1%
Transit Bus – urban	0	-	24	0.2%	43	0.1%	67	0.1%	0	24	49	73	0.1%
Para-transit Bus	0	-	1	<0.1%	3	<0.1%	4	<0.1%	0	1	6	6	<0.1%
Intercity Bus	1	0.7%	8	<0.1%	55	0.2%	64	0.1%	0	15	65	80	0.1%
Bus (other)	0	-	5	<0.1%	15	<0.1%	20	<0.1%	0	5	18	23	<0.1%
Motorcycle/Scooter	4	2.8%	131	1.3%	48	0.1%	183	0.4%	3	119	49	171	0.3%
Moped	1	0.7%	6	<0.1%	1	<0.1%	8	<0.1%	0	4	1	5	<0.1%
Bicycle	5	3.5%	240	2.3%	16	<0.1%	261	0.6%	2	292	20	314	0.6%
Ambulance	0	-	4	<0.1%	21	<0.1%	25	<0.1%	0	9	18	27	<0.1%
Fire	1	0.7%	4	<0.1%	15	<0.1%	20	<0.1%	0	4	16	20	<0.1%
Police	1	0.7%	29	0.3%	54	0.2%	84	0.2%	0	22	70	92	0.2%
Mobility Vehicle	0	-	0	-	1	<0.1%	1	<0.1%	0	0	1	1	<0.1%
Farm Equipment	0	-	8	<0.1%	16	<0.1%	24	<0.1%	0	8	17	26	<0.1%
Construction Equipment	1	0.7%	5	<0.1%	43	0.1%	49	0.1%	0	13	74	87	0.2%
Train/Other Rail Vehicle	0	-	0	-	1	<0.1%	1	<0.1%	0	0	1	1	<0.1%
Off-Road Vehicle	8	5.7%	11	0.1%	11	<0.1%	30	<0.1%	3	15	12	30	<0.1%
Total	141	100%	10,265	99%	34,286	100%	44,692	100%	140	11,772	41,966	53,879	100%

Section 7

Vehicle Involvement

Table 7-4 Vehicles Involved in Traffic Collisions for Combined Vehicle Categories

Table 7-4

Vehicle Types (Combined Categories) Involved in Traffic Collisions and Collision Severity: 2008, 2003-2007 Average

Vehicle Type	2008 Collision Severity						2008 Total	% of 2008 Total	2003-2007 Average Count of Collisions				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
Light Duty Vehicles	99	73.3%	8,914	89.6%	31,017	91.2%	40,030	90.8%	108	10,387	38,417	48,912	91.6%
Passenger vehicles	72	53.3%	7,652	76.9%	25,875	76.1%	33,599	76.2%	77	8,993	31,878	40,947	76.7%
Light trucks	27	20.0%	1,262	12.7%	5,142	15.1%	6,431	14.6%	31	1,394	6,540	7,965	14.9%
NSC Commercial Vehicles	21	15.6%	854	8.6%	2,832	8.3%	3,707	8.4%	23	892	3,215	4,130	7.7%
PSV Vehicles	2	1.5%	38	0.4%	90	0.3%	130	0.3%	1	34	105	140	0.3%
Motorcycle/Moped/Scooter	5	3.7%	137	1.4%	49	0.1%	191	0.4%	3	123	50	176	0.3%
Off-Road vehicles	8	5.9%	11	0.1%	11	<0.1%	30	<0.1%	3	15	12	30	<0.1%

Table 7-5 Vehicle Relative Involvement (per 10,000 Registered Vehicles) in Traffic Collision by Combined Vehicle Categories and Collision Severity

Table 7-5

Vehicle Relative Involvement (per 10,000 Registered Vehicles) in Traffic Collisions by Vehicle Type and Collision Severity: 2008, 2003-2007 Average

Vehicle Type	2008 Collision Severity				2003-2007 Average			
	Fatal	Injury	PDO	2008 Total	Fatal	Injury	PDO	Total
Light Duty Vehicles	1.6	140.7	489.5	631.8	1.8	172.0	636.2	810.0
Passenger vehicles	1.4	150.1	507.5	659.0	1.6	184.5	653.8	839.9
Light trucks	2.2	102.0	415.5	519.6	2.7	119.9	562.4	685.0
NSC Commercial Vehicles	3.1	124.5	413.0	540.6	3.9	152.5	549.8	706.2
PSV Vehicles	2.0	38.5	91.2	131.8	0.9	38.8	118.0	157.8
Motorcycle/Moped/Scooter	5.0	136.2	48.7	189.9	3.5	155.1	63.5	222.2

Light duty vehicles, including passenger vehicles, minivans and light trucks, represent 90% of the vehicles involved in all traffic collisions in 2008, relatively unchanged from the previous five years (2003 to 2007) on average (92%). NSC Commercial vehicles represent 8% of the vehicles involved, while public service (PSV) vehicles and motorcycles, scooters and mopeds (combined) represent about half of one percent each.

Light duty vehicles have the highest relative rate of involvement per 10,000 registered vehicles among all the vehicle types examined. Light duty vehicles (passenger vehicles and light trucks, combined) have a relative rate of involvement of 631.8 in 2008 and 810.0 in the previous five years (2003 to 2007) on average. NSC commercial vehicles have the second highest relative involvement rate, at 540.6 in 2008 and 706.2 over the previous five year period.

Motorcycles, including scooters and mopeds, have the lowest relative rate of involvement in traffic collisions among all vehicle types examined, both in 2008 and in the previous five years (2003 to 2007) on average.

However, motorcycles, scooters and mopeds are much more likely than any other vehicle type to be involved in a fatal collision. In 2008, motorcycles, scooters and mopeds had a relative involvement rate per 10,000 vehicles registered of 5.0 in fatal collisions, more than three times the involvement rate of light duty vehicles in fatal collisions. In the previous five year period (2003 to 2007) on average, motorcycles, scooters and mopeds had a vehicle involvement rate of 3.5 in fatal collisions, nearly twice the rate of light duty vehicles.

NOTE: No relative involvement rate for off-road vehicles (ORV) is calculated due to difficulty in developing a reliable and accurate population count of these vehicles.

SECTION 8 – Driver Involvement





Introduction

This section calculates the number of drivers involved in traffic collisions and breaks this down by age and gender of the driver. Relative involvement in traffic collisions is also detailed.

Key Highlights

In 2008, there were 42,247 drivers involved in traffic collisions. Of these:

- 121 were involved in fatal collisions;
- 9,899 were involved in injury collisions; and,
- 32,227 were involved in PDO collisions.

Drivers aged 16 to 24 years old account for the greatest proportion of drivers involved in traffic collisions in 2008, followed by drivers aged 45 to 54 and those aged 35 to 44.

- Total collisions: aged 16 to 24 – 23%; aged 25 to 34 – 18%; aged 35 to 44 – 18%; aged 45 to 54 – 19%; aged 55 to 64 – 12%; aged 65 and older – 9%.
- Fatal collisions: aged 16 to 24 – 23%; aged 25 to 34 – 13%; aged 35 to 44 – 21%; aged 45 to 54 – 21%; aged 55 to 64 – 13%; aged 65 and older – 9%.
- Injury collisions: aged 16 to 24 – 23%; aged 25 to 34 – 19%; aged 35 to 44 – 20%; aged 45 to 54 – 18%; aged 55 to 64 – 12%; aged 65 and older – 8%.
- PDO collisions: aged 16 to 24 – 23%; aged 25 to 34 – 18%; aged 35 to 44 – 18%; aged 45 to 54 – 19%; aged 55 to 64 – 12%; aged 65 and older – 10%.

Young drivers have a much higher relative rate of involvement in traffic collisions than older drivers.

Drivers aged 16 to 24 years old have a relative involvement rate (per 10,000 licensed drivers) of 717.8 in traffic collisions in 2008. This is:

- 1.5 times that of drivers aged 25 to 34 (rate of 493.8) and 35 to 44 (rate of 452.3);
- 1.8 times that of drivers aged 45 to 54 (rate of 403.9);
- Twice that of drivers aged 55 to 64 (rate of 348.7); and,
- 2.6 times that of drivers aged 65 and older (rate of 272.3).

The majority of drivers involved in traffic collisions are male. Among all drivers involved in traffic collisions in 2008 where the driver gender is known, 62% are male and 38% female.

- Fatal collisions: 72% involved male drivers, 28% female drivers.
- Injury collisions: 56% involved male drivers, 44% female drivers.
- PDO collisions: 63% involved male drivers, 37% female drivers.

Male drivers are much more likely to be involved in a traffic collision than female drivers. The relative rate of involvement for men in traffic collisions in 2008 was 546.4, nearly one and a half times that of females (369.3). Relative involvement rates (per 10,000 licensed drivers) for collisions of differing severity:

- Fatal collisions: male rate – 2.2, female rate – 0.9.
- Injury collisions: male rate – 120.2, female rate – 102.9.
- PDO collisions: male rate – 424.0, female rate – 265.4.

Major Elements Examined

Counts of drivers involved in collisions in Manitoba for 2008 and previous years are taken from Traffic Accident Reports (TAR) completed by law enforcement agencies and compiled by Manitoba Public Insurance. These counts are presented for all reportable collisions, for fatal collisions, for injury collisions and for property damage only (PDO) collisions.

It is important to note that the number of collisions is not equal to the number of drivers involved in those collisions; nor is the number of vehicles involved in collisions. Because some collisions involve more than one driver while others involve a single driver, the number of drivers will not equal the number of collisions. Likewise, not every vehicle involved in a collision will have a driver. Some collisions involve parked vehicles while other may involve driverless vehicles, such as construction or farm equipment. (A full definition of what constitutes a "driver" for this report is provided under the "Terms and Definitions" heading.) Because there are more drivers involved in collisions than collisions overall, relative involvement rates calculated based on the number of drivers will be higher than the relative involvement

rates calculated based on the number of collisions.

When comparing historical results of relative involvement rates per 10,000 licensed drivers, the reader is cautioned to note that data from 1999 to 2002 used a different methodology when counting the population of licensed drivers than has been recently implemented for this report. While presented here, it should be noted that calculations in these years are not directly comparable to the calculations for 2003 to 2008.

When exploring the number of drivers in different age groups involved in traffic collisions, the reader is cautioned that the data is incomplete. In 2008, one in five drivers (20%) is not identified by age. In the five year period (2003 to 2007) on average, more than 21% of the drivers are not identified by age. Likewise, gender is not always captured for each driver involved in a traffic collision. In 2008, 16% of the drivers involved in traffic collisions are not identified by gender. In the five year period (2003 to 2007) on average, 18% of drivers were not identified by gender.

The reader is cautioned that not all percentages and calculations in the following tables will add to 100% of the total noted. Rounding error will often produce a difference of one or two percentage points. Likewise, average calculations are presented for historical data from the years 2003 to 2007. Rounding error in these calculations will cause individual average counts not to add to total average counts in some cases.

The reader is cautioned when interpreting results regarding fatal collisions. Due to the small number of these types of collisions, fluctuations year-over-year could be dramatic; a small change in the total count of these types of collisions could have a significant effect on statistics such as percentage change to previous years and relative involvement rates.

Terms and Definitions

"Drivers"

- The number of drivers involved in collisions. It excludes pedestrians, bicyclists, snowmobiles, off-road vehicles, farm and construction equipment, trains and parked vehicles.

"Collision severity"

- A classification of a collision based on the most severe result of the collision, i.e., whether someone was killed (fatal), injured (injury) or property damage only (PDO) occurred.

"Fatal Collision"

- A motor vehicle collision in which at least one person is killed as a result of the collision. The death must have occurred within thirty days of the collision occurrence.

"Injury Collision"

- A motor vehicle collision in which at least one person has been recorded as sustaining some level of personal injury, but in which no one is fatally injured or killed. Levels of injury include: 'major' (admitted to hospital); 'minor' (treated and released from hospital); and, 'minimal' (no hospital treatment required).

"Property Damage Only (PDO) Collision"

- A motor vehicle collision in which no injury or fatality is sustained and only property damage is the result.

"Driver Involvement Rate"

- A calculation of the number of drivers involved in traffic collisions for every 10,000 drivers licensed to drive in Manitoba. The total number of drivers licensed to drive includes both active and suspended drivers. This relative involvement rate does not take into account the number of vehicle kilometres driven by each driver group. More detail regarding the methodology used to count licensed drivers can be found in "Section 2 Licensed Drivers" of this report.

Table 8-1 Ten Year Summary of Drivers Involved in Traffic Collisions

Table 8-1
Ten Year Summary of Drivers Involved in Traffic Collisions: 1999 to 2008

Year	Collision Severity						Total Collisions	% change to previous year
	Fatal	% change to previous year	Injury	% change to previous year	PDO	% change to previous year		
1999	151	-	12,096	-	32,615	-	44,862	-
2000	136	-9.9%	11,943	-1.3%	36,780	12.8%	48,859	8.9%
2001	127	-6.6%	11,377	-4.7%	34,820	-5.3%	46,324	-5.2%
2002	149	17.3%	11,957	5.1%	35,976	3.3%	48,082	3.8%
2003	138	-7.4%	12,267	2.6%	40,091	11.4%	52,496	9.2%
2004	127	-8.0%	11,674	-4.8%	40,325	0.6%	52,126	-0.7%
2005	126	-0.8%	11,069	-5.2%	37,775	-6.3%	48,970	-6.1%
2006	145	15.1%	10,853	-2.0%	35,446	-6.2%	46,444	-5.2%
2007	135	-6.9%	10,715	-1.3%	34,028	-4.0%	44,878	-3.4%
2008	121	-10.4%	9,899	-7.6%	32,227	-5.3%	42,247	-5.9%
2003-2007 Average*	134	-1.6%	11,316	-2.1%	37,533	-0.9%	48,983	-1.2%

* The "% change to previous year" for "2003-2007 Average" is an average rate of change for the time period 2003 to 2007.

In 2008, there were 42,247 drivers involved in traffic collisions. Of these:

- 121 were involved in fatal collisions;
- 9,899 were involved in injury collisions; and,
- 32,227 were involved in PDO collisions.

Overall, there were 6% fewer drivers involved in traffic collisions overall in 2008 compared to 2007 and 14% fewer than in the previous five years (2003 to 2007) on average. In 2008 there were:

- 10% fewer drivers involved in fatal collisions compared to 2007 and the previous five years on average;
- 8% fewer drivers involved in injury collisions compared to 2007 and 13% fewer than the previous five years on average; and
- 5% fewer drivers involved in PDO collisions compared to 2007 and 14% fewer than the previous five years on average.

The percentage decrease in the number of drivers involved in traffic collisions from 2007 to 2008 (-5.9%) is five times lower than the average rate of decrease in the previous five year period (2003 to 2007 - -1.2%) on average.

Table 8-2 Historical Summary of Driver Involvement (Relative Rate per 10,000 Licensed Drivers) in Traffic Collisions

Table 8-2

Summary of Driver Involvement Rate (per 10,000 Licensed Drivers) in Traffic Collisions: 2001 to 2008

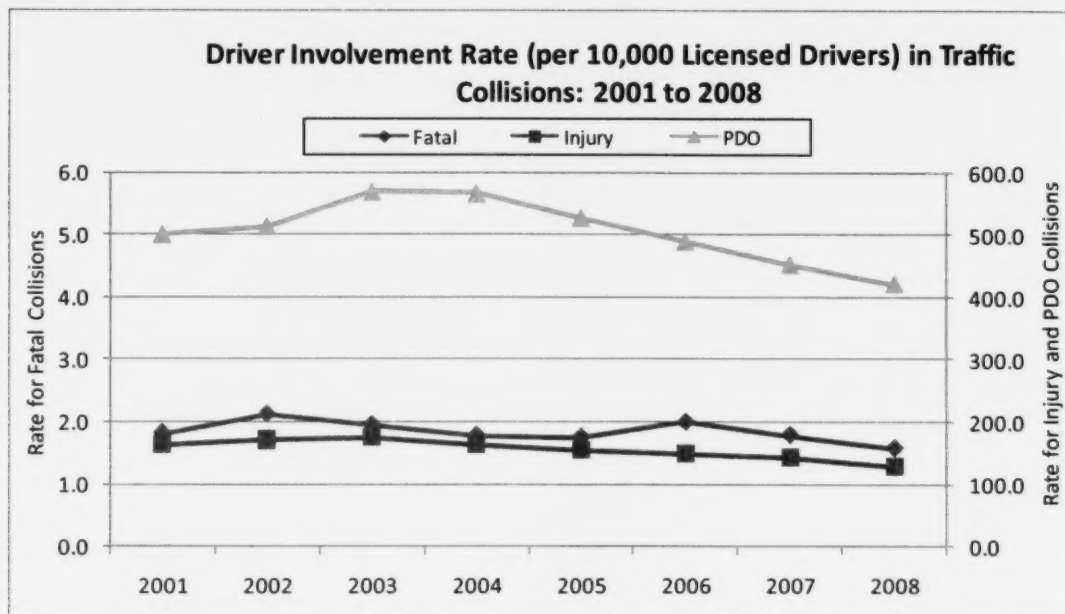
Year	Collision Severity						Total Collisions	% change to previous year
	Fatal	% change to previous year	Injury	% change to previous year	PDO	% change to previous year		
2001	1.8	-	163.5	-	500.5	-	665.8	-
2002	2.1	16.6%	170.8	4.4%	513.8	2.7%	686.7	3.1%
2003	2.0	-7.9%	174.3	2.1%	569.6	10.8%	745.8	8.6%
2004	1.8	-9.0%	164.1	-5.9%	566.8	-0.5%	732.6	-1.8%
2005	1.8	-1.4%	154.6	-5.8%	527.5	-6.9%	683.8	-6.7%
2006	2.0	13.8%	149.8	-3.1%	489.4	-7.2%	641.2	-6.2%
2007	1.8	-10.4%	142.4	-5.0%	452.3	-7.6%	596.5	-7.0%
2008	1.6	-11.8%	129.4	-9.1%	421.3	-6.9%	552.2	-7.4%
2003-2007 Average*	1.9	-3.0%	157.0	-3.5%	521.1	-2.3%	680.0	-2.6%

* The "% change to previous year" for "2003-2007 Average" is an average rate of change for the time period 2003 to 2007.

The relative rate of involvement for drivers in traffic collisions in 2008 is 552.2 per 10,000 total licensed drivers. This represents a 7% decrease from 2007 and a 19% decrease from the previous five years (2003 to 2007) on average. Driver involvement is also down for of each collision severity. In 2008, the driver relative rate of involvement in:

- Fatal collisions (1.6) is down nearly 12% compared to 2007 and 15% compared to the previous five year period;
- Injury collisions (129.4) is down 9% compared to 2007 and 18% compared to the previous five year period; and,
- PDO collisions (421.3) is down 7% compared to 2007 and 19% compared to the previous five year period.

Figure 8-1 Driver Involvement Rate (per 10,000 Licensed Drivers) in Traffic Collisions of Different Severity



The downward trend in relative rate of involvement for drivers in PDO collisions has been fairly consistent since 2004. This is also the case for the relative rate of involvement for drivers in injury collisions, which has been steadily declining since 2003. However, the relative rate of involvement for drivers in fatal collisions, although down in 2008 from 2007 and 2006, has only been decreasing since 2006. Prior to then, this rate had climbed to a high not seen since 2002 after experiencing a steady decline between 2002 and 2005.

Table 8-3 Drivers Involved in Traffic Collisions by Age Group and Collision Severity

Table 8-3
Total Drivers Involved in Traffic Collisions by Age Group and Collision Severity: 2008, 2003-2007 Average

Age Group	2008 Collision Severity						2008 Total Collisions	% of 2008 Total Collisions	2003-2007 Average Count of Drivers				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total Collisions
<16	1	0.8%	22	0.3%	23	<0.1%	46	0.1%	1	26	60	87	0.2%
16-19	12	10.0%	863	10.4%	2,732	10.7%	3,607	10.6%	13	1,013	3,442	4,467	11.6%
20-24	16	13.3%	1,048	12.7%	3,135	12.3%	4,199	12.4%	22	1,163	3,482	4,667	12.1%
25-34	15	12.5%	1,564	18.9%	4,507	17.6%	6,086	17.9%	25	1,766	4,952	6,743	17.5%
35-44	25	20.8%	1,634	19.8%	4,590	18.0%	6,249	18.4%	26	1,957	5,595	7,579	19.7%
45-54	25	20.8%	1,510	18.3%	4,882	19.1%	6,417	18.9%	16	1,668	5,263	6,947	18.0%
55-64	15	12.5%	967	11.7%	3,142	12.3%	4,124	12.2%	14	977	3,350	4,340	11.3%
65+	11	9.2%	654	7.9%	2,541	9.9%	3,206	9.4%	16	743	2,931	3,691	9.6%
Not Stated	1	-	1,637	-	6,675	-	8,313	-	1	2,004	8,457	10,461	-
Total*	121	100%	9,899	100%	32,227	100%	42,247	100%	134	11,316	37,533	48,983	100%

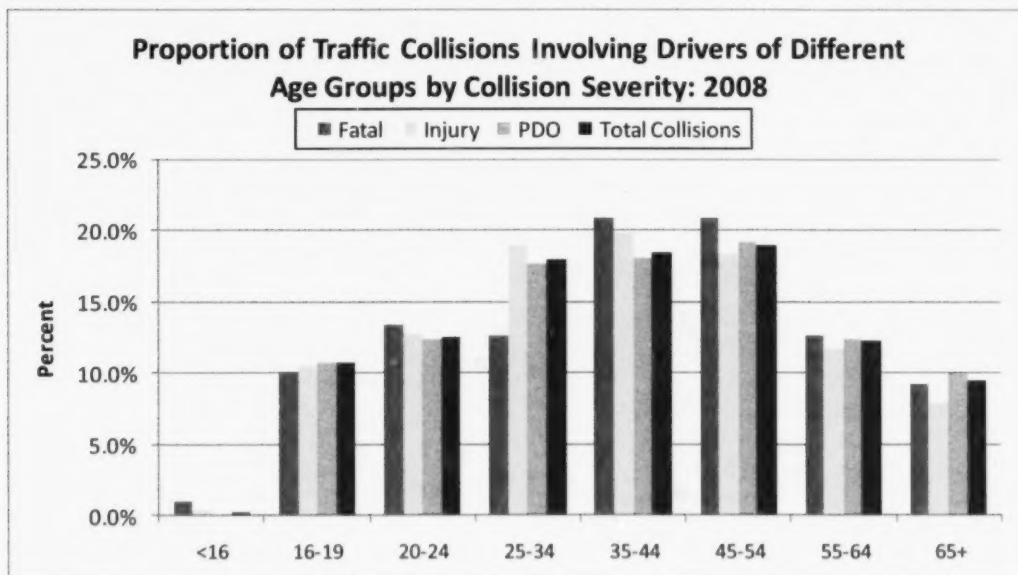
*Percentage of the total does not include the "not stated" category.

When compared to the previous five year period (2003 to 2007) on average, the proportion of collisions involving drivers:

- Aged 16 to 24 has fallen by 15% overall – these drivers were involved in 20% fewer fatal collisions, 12% fewer injury collisions and 15% fewer PDO collisions;
- Aged 25 to 34 has fallen by 10% overall – these drivers were involved in 40% fewer fatal collisions, 11% fewer injury collisions and 9% fewer PDO collisions;
- Aged 35 to 44 has fallen by 18% overall – these drivers were involved in 5% fewer fatal collisions, 17% fewer injury collisions and 18% fewer PDO collisions;
- Aged 45 to 54 has fallen by 8% overall – these drivers were involved in 54% more fatal collisions, but 9% fewer injury collisions and 7% fewer PDO collisions;
- Aged 55 to 64 has fallen by 5% overall – these drivers were involved in 10% more fatal collisions, 1% fewer injury collisions and 6% fewer PDO collisions; and,
- Aged 65 and older has fallen by 13% overall – these drivers were involved in 33% fewer fatal collisions, 12% fewer injury collisions and 13% fewer PDO collisions.

Drivers aged 16 to 24 years old account for the greatest proportion of traffic collisions in 2008. This is true for total collisions, fatal collisions, injury collisions and PDO collisions. Drivers aged 35 to 44 and those aged 45 to 54 account for the next highest total proportions of collisions in 2008.

Figure 8-2 Proportion of Traffic Collisions Involving Drivers of Different Age Groups by Collision Severity



Drivers aged 35 to 44 and 45 to 54 account for a higher proportion of fatal traffic collisions than they do injury and PDO collisions. This is also the case among drivers aged 20 to 24 and 55 to 64, although the differences in proportions among these latter groups is less.

Drivers aged 25 to 34 account for a higher proportion of injury and PDO collisions than they do fatal collisions.

Drivers aged 65 and older account for a greater proportion of PDO collisions than they do for fatal and injury collisions.

Table 8-4 Driver Involvement Rate (per 10,000 Licensed Drivers) in Traffic Collisions by Age Group and Collision Severity

Table 8-4

Driver Involvement Rate (per 10,000 Licensed Drivers) in Traffic Collisions by Age Group and Collision Severity: 2008, 2003-2007 Average

Age Group	2008 Collision Severity			2008 Total Collisions	2003-2007 Average Count of Drivers			
	Fatal	Injury	PDO		Fatal	Injury	PDO	Total
<16	-	-	-	-	-	-	-	-
16-19	2.6	185.1	586.0	773.6	2.9	223.4	759.2	985.4
20-24	2.6	168.7	504.6	675.9	3.7	197.7	591.9	793.3
25-34	1.2	126.9	365.7	493.8	2.1	150.0	420.8	572.9
35-44	1.8	118.3	332.2	452.3	1.9	137.7	393.6	533.2
45-54	1.6	95.0	307.3	403.9	1.1	113.5	358.3	472.9
55-64	1.3	81.8	265.7	348.7	1.3	94.4	323.9	419.7
65+	0.9	55.5	215.8	272.3	2.7	120.2	474.3	597.1

Recognizing that counts of drivers involved in collisions could be impacted either positively or negatively by changing population statistics, relative involvement rates per 10,000 licensed drivers is examined to provide a standardized collision rate comparison. This eliminates the effect of changing population size and focuses on the rate at which drivers are involved in collisions instead of simply a raw count of the number of drivers involved overall.

Young drivers have a much higher relative rate of involvement in traffic collisions than older drivers. Drivers aged 16 to 19 have the highest rates for total collisions and for collisions of each different severity, closely followed by drivers aged 20 to 24. Combined, drivers aged 16 to 24 have a relative involvement rate (per 10,000 licensed drivers) of 717.8 in traffic collisions in 2008. This is:

- 1.5 times that of drivers aged 25 to 34 (rate of 493.8) and 35 to 44 (rate of 452.3);
- 1.8 times that of drivers aged 45 to 54 (rate of 403.9);
- Twice that of drivers aged 55 to 64 (rate of 348.7); and,
- 2.6 times that of drivers aged 65 and older (rate of 272.3).

Compared to the previous five year period (2003 to 2007) on average, driver involvement rates in total collisions are down for all age groups. This is also the case for driver involvement rates for collisions of different severity, with the exception of driver involvement in fatal collisions for drivers aged 45 to 54, where the rate increased substantially. Compared to the previous five year period, driver involvement rates for:

- Drivers aged 16 to 24 are down 18% for total collisions, down 24% for fatal collisions, down 16% for injury collisions and down 19% for PDO collisions;
- Drivers aged 25 to 34 are down 14% for total collisions, down 42% for fatal collisions, down 15% for injury collisions and down 13% for PDO collisions;
- Drivers aged 35 to 44 are down 15% for total collisions, down 3% for fatal collisions, down 14% for injury collisions and down 16% for PDO collisions;
- Drivers aged 45 to 54 are down 15% for total collisions, up 43% for fatal collisions, down 16% for injury collisions and down 14% for PDO collisions;
- Drivers aged 55 to 64 are down 17% for total collisions, down 4% for fatal collisions, down 13% for injury collisions and down 18% for PDO collisions;
- Drivers aged 65 and older are down 54% for total collisions, down 65% for fatal collisions, down 54% for injury collisions and down 55% for PDO collisions;

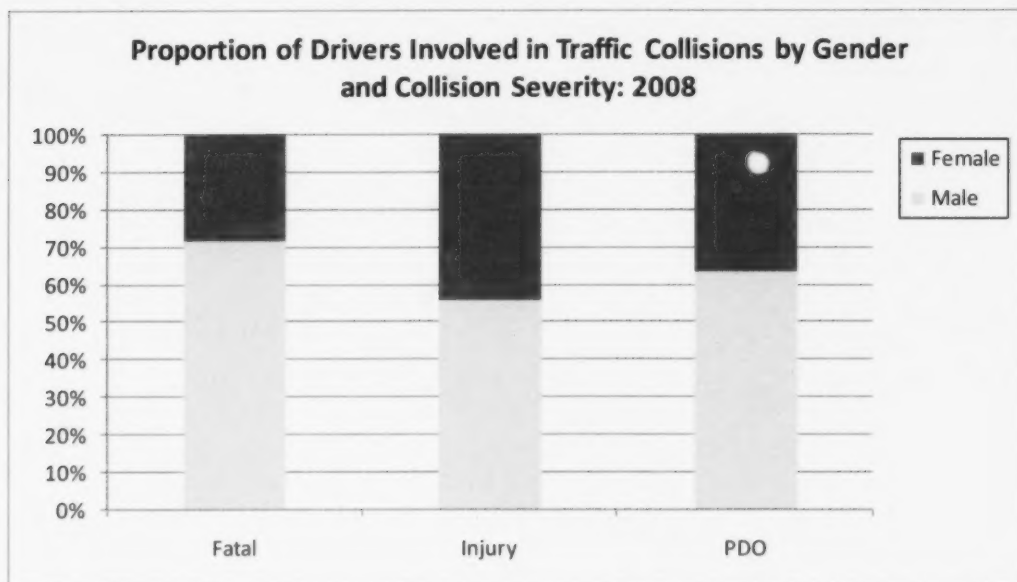
Table 8-5 Drivers Involved in Traffic Collisions by Gender and Age Group and Collision Severity

Table 8-5

Total Drivers Involved in Traffic Collisions by Gender and Age Group and Collision Severity: 2008, 2003-2007 Average

Gender - Age Group		2008 Collision Severity						2008 Total Collisions*	% of 2008 Total Collisions	2003-2007 Average Count of Drivers				
		Fatal	% of Total Fatal*	Injury	% of Total Injury*	PDO	% of Total PDO*			Fatal	Injury	PDO	Total	% of Total Collisions*
Female	<16	0	-	5	0.1%	10	0.1%	15	0.1%	0	11	26	37	0.2%
	16-19	4	11.8%	397	10.9%	965	10.5%	1,366	10.6%	4	451	1,282	1,738	11.7%
	20-24	6	17.6%	483	13.3%	1,171	12.7%	1,660	12.9%	8	517	1,267	1,792	12.1%
	25-34	2	5.9%	715	19.7%	1,672	18.2%	2,389	18.6%	6	802	1,837	2,645	17.8%
	35-44	8	23.5%	716	19.7%	1,762	19.2%	2,486	19.4%	6	903	2,172	3,080	20.8%
	45-54	7	20.6%	660	18.2%	1,715	18.7%	2,382	18.5%	3	744	1,965	2,712	18.3%
	55-64	3	8.8%	392	10.8%	1,047	11.4%	1,442	11.2%	2	405	1,169	1,576	10.6%
	65+	4	11.8%	259	7.1%	843	9.2%	1,106	8.6%	5	263	988	1,257	8.5%
	Not Stated	0	-	160	-	580	-	740	-	0	138	515	653	-
Total Female*		34	100%	3,787	100%	9,765	100%	13,586	100%	33	4,233	11,222	15,488	100%
Male	<16	1	1.2%	12	0.3%	12	<0.1%	25	0.1%	1	13	32	46	0.2%
	16-19	8	9.3%	457	10.2%	1,720	10.8%	2,185	10.7%	9	554	2,142	2,705	11.5%
	20-24	10	11.6%	539	12.0%	1,901	12.0%	2,450	12.0%	14	637	2,182	2,834	12.1%
	25-34	13	15.1%	810	18.0%	2,729	17.2%	3,552	17.4%	19	951	3,082	4,052	17.3%
	35-44	17	19.8%	893	19.9%	2,736	17.2%	3,646	17.8%	21	1,043	3,392	4,456	19.0%
	45-54	18	20.9%	828	18.4%	3,077	19.4%	3,923	19.2%	13	917	3,276	4,207	17.9%
	55-64	12	14.0%	564	12.6%	2,055	12.9%	2,631	12.9%	11	569	2,168	2,748	11.7%
	65+	7	8.1%	388	8.6%	1,664	10.5%	2,059	10.1%	11	476	1,930	2,418	10.3%
	Not Stated	0	-	282	-	948	-	1,230	-	0	255	940	1,195	-
Total Male*		86	100%	4,773	100%	16,842	100%	21,701	100%	100	5,415	19,144	24,659	100%

*Percentage of the total does not include the "not stated" category.

Figure 8-3 Proportion of Drivers Involved in Traffic Collisions by Gender and Collision Severity

The majority of drivers involved in traffic collisions are male. Among all traffic collisions in 2008 where the gender of the driver is known, 62% are male and 38% female.

- Fatal collisions: 72% involved male drivers, 28% female drivers.
- Injury collisions: 56% involved male drivers, 44% female drivers.
- PDO collisions: 63% involved male drivers, 37% female drivers.

Table 8-6 Drivers Involved in Traffic Collisions by Age Group and Gender and Collision Severity

Table 8-6

Total Drivers Involved in Traffic Collisions by Age Group and Gender and Collision Severity: 2008, 2003-2007 Average

Age Group - Gender		2008 Collision Severity						2008 Total Collisions	% of 2008 Total Collisions*	2003-2007 Average Count of Drivers				
		Fatal	% of Total Fatal*	Injury	% of Total Injury*	PDO	% of Total PDO*			Fatal	Injury	PDO	Total	% of Total Collisions*
<16 to 24	Female	10	8.3%	885	10.9%	2,146	8.6%	3,041	9.1%	12	979	2,576	3,566	9.3%
	Male	19	15.8%	1,008	12.4%	3,633	14.5%	4,660	14.0%	24	1,204	4,356	5,584	14.6%
25 to 34	Female	2	1.7%	715	8.8%	1,672	6.7%	2,389	7.2%	6	802	1,837	2,645	6.9%
	Male	13	10.8%	810	10.0%	2,729	10.9%	3,552	10.7%	19	951	3,082	4,052	10.6%
35 to 44	Female	8	6.7%	716	8.8%	1,762	7.0%	2,486	7.5%	6	903	2,172	3,080	8.0%
	Male	17	14.2%	893	11.0%	2,736	10.9%	3,646	10.9%	21	1,043	3,392	4,456	11.6%
45 to 54	Female	7	5.8%	660	8.1%	1,715	6.8%	2,382	7.1%	3	744	1,965	2,712	7.1%
	Male	18	15.0%	828	10.2%	3,077	12.3%	3,923	11.8%	13	917	3,276	4,207	11.0%
55 to 64	Female	3	2.5%	392	4.8%	1,047	4.2%	1,442	4.3%	2	405	1,169	1,576	4.1%
	Male	12	10.0%	564	6.9%	2,055	8.2%	2,631	7.9%	11	569	2,168	2,748	7.2%
65 and older	Female	4	3.3%	259	3.2%	843	3.4%	1,106	3.3%	5	263	988	1,257	3.3%
	Male	7	5.8%	388	4.8%	1,664	6.6%	2,059	6.2%	11	476	1,930	2,418	6.3%
Not Stated	Female	0	-	160	-	580	-	740	-	0	138	515	653	-
	Male	0	-	282	-	948	-	1,230	-	0	255	940	1,195	-
Total	Female	34	28.3%	3,787	44.7%	9,765	36.6%	13,586	38.6%	33	4,233	11,222	15,488	38.7%
	Male	86	71.7%	4,773	55.3%	16,842	63.4%	21,701	61.4%	100	5,415	19,144	24,659	61.3%

*Percentage of the total does not include the "not stated" category.

Young male drivers account for a higher proportion of total collisions and collisions of each severity than any other group of drivers. In 2008:

- Male drivers aged less than 16 to 24 account for 14% of total collisions, 16% of fatal collisions, 12% of injury collisions and 15% of PDO collisions;
- Female drivers aged 16 to 24 account for 9% of total collisions, 8% of fatal collisions, 11% of injury collisions and 9% of PDO collisions;

Table 8-7 Driver Involvement Rate (per 10,000 Licensed Drivers) in Traffic Collisions by Gender and Age Group and Collision Severity

Table 8-7

Driver Involvement Rate (per 10,000 Licensed Drivers) in Traffic Collisions by Gender and Age Group and Collision Severity: 2008, 2003-2007 Average

Gender - Age Group		2008 Collision Severity			2008 Total Collisions	2003-2007 Average Count of Drivers			
		Fatal	Injury	PDO		Fatal	Injury	PDO	Total
Female	<16	-	-	-	-	-	-	-	-
	16-19	1.8	175.2	425.9	602.9	1.7	205.7	584.5	791.9
	20-24	2.0	160.1	388.1	550.1	2.7	182.4	447.3	632.4
	25-34	0.3	119.0	278.4	397.7	1.0	140.3	321.3	462.6
	35-44	1.2	106.8	262.7	370.7	0.8	131.5	316.3	448.6
	45-54	0.9	86.4	224.6	311.9	0.4	105.9	279.7	385.9
	55-64	0.5	69.1	184.6	254.3	0.4	82.8	239.1	322.3
	65+	0.7	47.2	153.8	201.8	1.1	53.4	200.8	255.2
Male	<16	-	-	-	-	-	-	-	-
	16-19	3.3	190.7	717.7	911.7	3.9	236.7	915.6	1,156.2
	20-24	3.1	168.7	594.9	766.8	4.7	208.8	715.6	929.1
	25-34	2.1	128.2	432.0	562.2	3.1	157.1	509.1	669.3
	35-44	2.4	125.6	384.9	512.9	2.8	142.0	461.6	606.4
	45-54	2.2	100.3	372.9	475.4	1.7	119.6	427.5	548.9
	55-64	1.9	91.6	333.9	427.5	2.1	104.3	397.5	503.9
	65+	1.1	61.6	264.4	327.1	1.9	80.8	327.5	410.2

Male drivers are much more likely to be involved in a traffic collision than female drivers. The relative rate of involvement for men in traffic collisions in 2008 was 546.4, nearly one and a half times that of females (369.3). Relative involvement rates (per 10,000 licensed drivers) by collision severity:

- Fatal collisions: male rate – 2.2, female rate – 0.9.
- Injury collisions: male rate – 120.2, female rate – 102.9.
- PDO collisions: male rate – 424.0, female rate – 265.4.

In 2008, driver involvement rates for female drivers of all age groups are lower than for equivalent age groups of male drivers. However, young females, both in the 16 to 19 age bracket and the 20 to 24 age bracket, have higher driver involvement rates than all the male driver groups aged 35 and older and a nearly equal rate to that of males aged 25 to 34.

Young males, especially those aged 16 to 19, have the highest driver involvement rates of all driver-gender age groups.

Compared to the previous five year period (2003 to 2007) on average, driver involvement rates for all gender-age groups are down for total collisions, injury collisions and PDO collisions. However, when considering driver involvement rates in fatal collisions, there are some increases in the 2008 that stand out from the general downward trend, including:

- Female rates in fatal collisions increased 41% for those aged 35 to 44 and more than doubled for those aged 45 to 54; and,
- Male rates in fatal collisions increased 25% for those aged 45 to 54.

SECTION 9 – Contributing Factors





Introduction

This section examines the contributing factors to traffic collisions as reported by police on the Traffic Accident Report (TAR). Detail is provided for collision severity and for the age of the driver involved in the collision. Driver involvement rates (per 10,000 licensed drivers) in collisions with specific contributing factors are detailed.

Key Highlights

In 2008, half of the drivers involved in traffic collisions were recorded as being not at-fault in the collision. Another one in three (33%) had no contributing factors recorded for the collision.

- 37% of drivers involved in a fatal collision were noted as not being at-fault.
- 52% of the drivers in an injury collision were noted as not being at-fault.

At-fault driver actions were recorded for 18% of the drivers involved in traffic collisions in 2008.

- 42% of the drivers involved in fatal collisions had an at-fault driver action recorded.
- 22% of the drivers involved in injury collisions had an at-fault driver action recorded.

At-fault human conditions were recorded as contributing factors for 4% of the drivers involved in traffic collisions in 2008.

- 28% of the drivers involved in fatal collisions had an at-fault human condition recorded.
- 6% of the drivers involved in injury collisions had an at-fault human condition recorded.

Environmental conditions were recorded as contributing factors for 14% of drivers involved in collisions in 2008.

Driver involvement (per 10,000 licensed drivers) in traffic collisions where:

- Any at-fault "driver action" was recorded is 96.7 in 2008, down 21% from the previous five years (122.8 on average in 2003 to 2007);
- "Speeding" was recorded as a contributing factor is 20.1 in 2008, down nearly 14% from the previous five years (23.2 on average in 2003 to 2007);
- "Careless driving" was recorded as a contributing factor is 8.5 in 2008, down less than one percent from the previous five years (8.6 on average in 2003 to 2007);
- "Fail to yield right-of-way" was recorded as a contributing factor is 14.3 in 2008, down 26% from the previous five years (19.3 on average in 2003 to 2007);
- "Lost control" was recorded as a contributing factor is 12.0 in 2008, up 15% from the previous five years (10.4 on average in 2003 to 2007);
- "Impaired" was recorded as a contributing factor is 4.9 in 2008, down 27% from the previous five years (6.7 on average in 2003 to 2007);
- "Distraction/inattention" was recorded as a contributing factor is 16.8 in 2008, down 16% from the previous five years (20.1 on average in 2003 to 2007);
- "Animal action - wild" was recorded as a contributing factor is 38.2 in 2008, down 24% from the previous five years (50.2 on average in 2003 to 2007); and,
- "Slippery road surface" was recorded as a contributing factor is 25.8 in 2008, down nearly 21% from the previous five years (32.5 on average in 2003 to 2007).

Younger drivers, especially those under the age of 25, tend to have higher driver involvement rates in traffic collisions overall and in collisions with specific contributing factors noted.

The most prevalent at-fault contributing factors recorded for the drivers of vehicles in which victims are killed include:

- "Lost control/Drive off the road" – 21% of victims killed;
- "Had been drinking" – 20% of victims killed;
- "Ability impaired by alcohol" – 17% of victims killed;
- "Careless driving" – 12% of victims killed; and,
- "Unsafe operating speed" and "Exceeding speed limit" – 9% each.

Major Elements Examined

Counts of drivers involved in collisions in Manitoba for 2008 and previous years are taken from Traffic Accident Reports (TAR) completed by law enforcement agencies and compiled by Manitoba Public Insurance. These counts are presented for all reportable collisions, for fatal collisions, for injury collisions and for property damage only (PDO) collisions.

When reviewing the "Contributing Factors" for a traffic collision, the reader is cautioned to note that more than one contributing factor can be recorded for each collision. The total count of contributing factors noted will add to more than the number of collisions, vehicles or drivers in those crashes.

For the purposes of this report, "speeding" as a contributing factor is discussed as being a combination of the individual factors "exceeding speed limit", "driving too fast for conditions" and "unsafe operating speed (too fast or too slow)".

For the purposes of this report, "impaired" as a contributing factor is discussed as being a combination of the individual factors "ability impaired by alcohol", "ability impaired by drugs" and "had been drinking/suspected alcohol use".

It is important to note that the number of collisions is not equal to the number of drivers involved in those collisions because some collisions involve more than one driver while others involve a single driver. (A full definition of what constitutes a "driver" for this report is provided under the "Terms and Definitions" heading.) Because there are more drivers involved in collisions than collisions overall, relative involvement rates calculated based on the number of drivers will be higher than the relative involvement rates calculated based on the number of collisions.

When exploring the number of drivers in different age groups involved in traffic collisions, the reader is cautioned that the data is incomplete. In 2008, one in five drivers (20%) is not identified by age. In the five year period (2003 to 2007) on average, more than 21% of the drivers are not identified by age.

The reader is cautioned that not all percentages and calculations in the following tables will add to 100% of the total noted. Rounding error will often produce a difference of one or two percentage points. Likewise, average calculations are presented for historical data from the years 2003 to 2007. Rounding error in these calculations will cause individual average counts not to add to total average counts in some cases.

The reader is cautioned when interpreting results regarding fatal collisions. Due to the small numbers of these collisions, fluctuations year-over-year could be dramatic; for example, a small change in the total count of fatal collisions could have a significant effect on statistics such as percentage change to previous years and relative involvement rates.

Terms and Definitions**"Contributing Factor"**

- Those circumstances or factors that the reporting police officer recorded as having contributed to the collision or its severity. Factors can be selected from four categories: driver action, human condition, vehicle condition, or environmental condition. The TAR allows for up to three contributing factors to be recorded for each driver or vehicle involved in the collision.

"At-fault Contributing Factor"

- A contributing factor where some action or condition other than "driving properly" and "apparently normal" has been noted.

"Driver Action"

- A category of contributing factors attributed to actions taken or performed by a driver immediately prior to a collision.

"Human Condition"

- A category of contributing factors attributed to the physical or mental condition of a driver immediately prior to a collision, most often that limit the driver's ability to drive safely or properly.

"Vehicle Condition"

- A category of contributing factors attributed to the physical condition of a vehicle immediately prior to a collision.

"Environmental Condition"

- A category of contributing factors attributed to environmental conditions (i.e., weather, road surface and animal actions) immediately prior to a collision.

"Drivers"

- The number of drivers involved in collisions. It excludes pedestrians, bicyclists, snowmobiles, off-road vehicles, farm and construction equipment, trains and parked vehicles.

"Collision severity"

- A classification of a collision based on the most severe result of the collision, i.e., whether someone was killed (fatal), injured (injury) or property damage only (PDO) occurred.

"Fatal Collision"

- A motor vehicle collision in which at least one person is killed as a result of the collision. The death must have occurred within thirty days of the collision occurrence.

"Injury Collision"

- A motor vehicle collision in which at least one person has been recorded as sustaining some level of personal injury, but in which no one is fatally injured or killed. Levels of injury include: 'major' (admitted to hospital); 'minor' (treated and released from hospital); and, 'minimal' (no hospital treatment required).

"Property Damage Only (PDO) Collision"

- A motor vehicle collision in which no injury or fatality is sustained and only property damage is the result.

"Driver Involvement Rate"

- A calculation of the number of drivers involved in traffic collisions for every 10,000 drivers licensed to drive in Manitoba. The total number of drivers licensed to drive includes both active and suspended drivers. This relative involvement rate does not take into account the number of vehicle kilometres driven by each driver group. More detail regarding the methodology used to count licensed drivers can be found in "*Section 2 Licensed Drivers*" of this report.

Table 9-1 Drivers Involved in Traffic Collisions by Contributing Factor and Collision Severity

Table 9-1
Drivers Involved in Collisions by Contributing Factors and Collision Severity: 2008

Contributing Factor	2008 Collision Severity						2008 Total Drivers	% of 2008 Total Drivers
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Driver Action - Driving Properly & Human Condition - Apparently Normal	28	23.1%	3,057	30.9%	8,987	27.9%	12,072	28.6%
Driver Action - Driving properly	6	5.0%	481	4.9%	1,643	5.1%	2,130	5.0%
Any At-fault Driver Action	51	42.1%	2,150	21.7%	5,197	16.1%	7,398	17.5%
Following too closely	1	0.8%	273	2.8%	729	2.3%	1,003	2.4%
Turning improperly	1	0.8%	116	1.2%	389	1.2%	506	1.2%
Exceeding speed limit	7	5.8%	56	0.6%	75	0.2%	138	0.3%
Driving too fast for conditions	6	5.0%	404	4.1%	816	2.5%	1,226	2.9%
Unsafe operating speed (Too fast or too slow)	6	5.0%	108	1.1%	82	0.3%	196	0.5%
Passing improperly	1	0.8%	19	0.2%	98	0.3%	118	0.3%
Changing lanes improperly	1	0.8%	36	0.4%	273	0.8%	310	0.7%
Fail to yield right of way	4	3.3%	297	3.0%	795	2.5%	1,096	2.6%
Disobey traffic control device/officer	2	1.7%	190	1.9%	310	1.0%	502	1.2%
Drive wrong way on roadway	1	0.8%	7	<0.1%	15	<0.1%	23	<0.1%
Passing a vehicle at pedestrian X-walk	0	-	3	<0.1%	0	-	3	<0.1%
Back unsafely	0	-	24	0.2%	441	1.4%	465	1.1%
Parking improperly	0	-	2	<0.1%	31	<0.1%	33	<0.1%
Careless Driving	14	11.6%	291	2.9%	348	1.1%	653	1.5%
Lost control/Drive off road	17	14.0%	433	4.4%	467	1.4%	917	2.2%
Driverless vehicle ran out of control	0	-	0	-	6	<0.1%	6	<0.1%
Leave stop sign before safe to do so	1	0.8%	111	1.1%	155	0.5%	267	0.6%
Failed to signal	0	-	3	<0.1%	21	<0.1%	24	<0.1%
Take avoiding action	4	3.3%	95	1.0%	238	0.7%	337	0.8%
Driver inexperience	2	1.7%	141	1.4%	325	1.0%	468	1.1%
Pedestrian error/confusion	1	0.8%	18	0.2%	7	<0.1%	26	<0.1%

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Contributing Factor	2008 Collision Severity						2008 Total Drivers	% of 2008 Total Drivers
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Human Condition - Apparently Normal	11	9.1%	1,558	15.7%	5,521	17.1%	7,090	16.8%
Any At-fault Human Condition	34	28.1%	595	6.0%	1,246	3.9%	1,875	4.4%
Loss of consciousness/Blackout prior to collision	1	0.8%	29	0.3%	16	<0.1%	46	0.1%
Extreme fatigue/Fell asleep	1	0.8%	49	0.5%	63	0.2%	113	0.3%
Defective eyesight	0	-	6	<0.1%	9	<0.1%	15	<0.1%
Defective hearing	1	0.8%	1	<0.1%	2	<0.1%	4	<0.1%
Medical disability	0	-	7	<0.1%	5	<0.1%	12	<0.1%
Physical disability	0	-	3	<0.1%	15	<0.1%	18	<0.1%
Mental disability	0	-	4	<0.1%	3	<0.1%	7	<0.1%
Mental confusion/Inability to remember	0	-	11	0.1%	12	<0.1%	23	<0.1%
Sudden illness	2	1.7%	6	<0.1%	7	<0.1%	15	<0.1%
Ability impaired alcohol	12	9.9%	83	0.8%	142	0.4%	237	0.6%
Ability impaired drugs	2	1.7%	7	<0.1%	9	<0.1%	18	<0.1%
Had been drinking/Suspected alcohol use	15	12.4%	50	0.5%	71	0.2%	136	0.3%
Distraction/Inattention	5	4.1%	372	3.8%	912	2.8%	1,289	3.1%
Exceed hours of service (commercial drivers only)	0	-	0	-	1	<0.1%	1	<0.1%
No apparent (vehicle) defect	54	44.6%	4,470	45.2%	12,423	38.5%	16,947	40.1%
Any At-fault Vehicle Defect	3	2.5%	46	0.5%	182	0.6%	231	0.5%
Defective brakes	0	-	11	0.1%	39	0.1%	50	0.1%
Defective steering	0	-	4	<0.1%	7	<0.1%	11	<0.1%
Defective headlights	1	0.8%	0	-	2	<0.1%	3	<0.1%
Defective brake lights	0	-	0	-	8	<0.1%	8	<0.1%
Defective lighting (unspecified)	0	-	1	<0.1%	2	<0.1%	3	<0.1%
Defective engine controls/drive train	0	-	4	<0.1%	14	<0.1%	18	<0.1%
Defective suspension/wheels	0	-	3	<0.1%	8	<0.1%	11	<0.1%
Defective tires	1	0.8%	6	<0.1%	34	0.1%	41	<0.1%
Tow hitch/yoke defective	0	-	3	<0.1%	6	<0.1%	9	<0.1%
Defective exhaust system	1	0.8%	1	<0.1%	1	<0.1%	3	<0.1%
Hood/tailgate/door/covering opened	0	-	4	<0.1%	7	<0.1%	11	<0.1%
Defective glazing (obscured windows)	0	-	0	-	6	<0.1%	6	<0.1%
Vehicle modifications	0	-	1	<0.1%	16	<0.1%	17	<0.1%
Fire	0	-	0	-	0	-	0	-

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Contributing Factor	2008 Collision Severity						2008 Total Drivers	% of 2008 Total Drivers
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Overloaded/oversized	0	-	0	-	2	<0.1%	2	<0.1%
Load shifted/spilled	0	-	6	<0.1%	16	<0.1%	22	<0.1%
Jack-knife/trailer swing	0	-	1	<0.1%	10	<0.1%	11	<0.1%
Hydroplaning tires	0	-	2	<0.1%	6	<0.1%	8	<0.1%
Any At-fault Environmental Condition	9	7.4%	784	7.9%	5,170	16.0%	5,963	14.1%
Animal action - Wild	1	0.8%	200	2.0%	2,725	8.5%	2,926	6.9%
Animal action - Domestic	0	-	26	0.3%	122	0.4%	148	0.4%
Slippery road surface	3	2.5%	347	3.5%	1,626	5.0%	1,976	4.7%
Snow drift	0	-	26	0.3%	145	0.4%	171	0.4%
Obstruction/debris on roadway	0	-	19	0.2%	97	0.3%	116	0.3%
View obstructed/limited	2	1.7%	42	0.4%	187	0.6%	231	0.5%
Glare/reflection	3	2.5%	19	0.2%	55	0.2%	77	0.2%
Construction zone	0	-	6	<0.1%	26	<0.1%	32	<0.1%
Defective driving surface	0	-	32	0.3%	92	0.3%	124	0.3%
Shoulders defective	0	-	3	<0.1%	14	<0.1%	17	<0.1%
Lane markings inadequate	0	-	3	<0.1%	2	<0.1%	5	<0.1%
Defective/inoperative traffic control device	0	-	1	<0.1%	10	<0.1%	11	<0.1%
Weather	1	0.8%	59	0.6%	220	0.7%	280	0.7%
Pedestrian corridor in use	0	-	12	0.1%	4	<0.1%	16	<0.1%
Uninvolved vehicle	0	-	21	0.2%	75	0.2%	96	0.2%
Uninvolved pedestrian	0	-	4	<0.1%	10	<0.1%	14	<0.1%
Presence of prior accident	0	-	11	0.1%	28	<0.1%	39	<0.1%
No contributing factor(s) identified	20	16.5%	3,083	31.1%	10,823	33.6%	13,926	33.0%
Not applicable/Not stated	0	-	1	<0.1%	0	-	1	<0.1%
Total	121	100%	9,899	100.0%	32,227	100.0%	42,247	100.0%

*NOTE: For each vehicle and/or driver involved in a collision, police can record up to three contributing factors. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

Table 9-1a Drivers Involved in Traffic Collisions by Contributing Factor and Collision Severity for Previous Five Years

Table 9-1a

Drivers Involved in Collisions by Contributing Factors and Collision Severity: 2003 to 2007

Contributing Factor	2003-2007 Average Count of Drivers				
	Fatal	Injury	PDO	Total Drivers	% of Total Victims
Driver Action - Driving Properly & Human Condition - Apparently Normal	32	3,967	11,167	15,166	31.0%
Driver Action - Driving properly	5	452	1,509	1,966	4.0%
Any At-fault Driver Action	63	2,325	6,476	8,864	18.1%
Following too closely	1	336	801	1,138	2.3%
Turning improperly	2	152	477	631	1.3%
Exceeding speed limit	10	58	85	154	0.3%
Driving too fast for conditions	11	357	1,003	1,371	2.8%
Unsafe operating speed (Too fast or too slow)	5	56	113	174	0.4%
Passing improperly	3	31	99	132	0.3%
Changing lanes improperly	0	49	299	348	0.7%
Fail to yield right of way	5	421	966	1,392	2.8%
Disobey traffic control device/officer	4	216	339	559	1.1%
Drive wrong way on roadway	3	12	23	38	<0.1%
Passing a vehicle at pedestrian X-walk	0	5	1	6	<0.1%
Back unsafely	0	38	943	980	2.0%
Parking improperly	1	4	75	80	0.2%
Careless Driving	7	206	406	619	1.3%
Lost control/Drive off road	17	262	471	750	1.5%
Driverless vehicle ran out of control	0	3	10	14	<0.1%
Leave stop sign before safe to do so	1	116	227	344	0.7%
Failed to signal	0	3	12	15	<0.1%
Take avoiding action	3	98	256	357	0.7%
Driver inexperience	5	130	328	463	0.9%
Pedestrian error/confusion	2	19	12	32	<0.1%
Human Condition - Apparently Normal	20	1,758	5,595	7,373	15.1%
Any At-fault Human Condition	40	699	1,385	2,124	4.3%
Loss of consciousness/Blackout prior to collision	1	30	14	45	<0.1%
Extreme fatigue/Fell asleep	3	49	65	118	0.2%
Defective eyesight	0	5	13	18	<0.1%
Defective hearing	0	1	4	5	<0.1%
Medical disability	1	8	11	19	<0.1%
Physical disability	0	4	13	17	<0.1%
Mental disability	0	2	4	6	<0.1%
Mental confusion/Inability to remember	0	13	19	32	<0.1%
Sudden illness	0	7	5	12	<0.1%

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Contributing Factor	2003-2007 Average Count of Drivers				
	Fatal	Injury	PDO	Total Drivers	% of Total Victims
Ability impaired alcohol	13	114	171	298	0.6%
Ability impaired drugs	2	7	7	15	<0.1%
Had been drinking/Suspected alcohol use	11	59	89	159	0.3%
Distraction/Inattention	10	435	1,005	1,449	3.0%
Exceed hours of service (commercial drivers only)	0	1	1	2	<0.1%
No apparent (vehicle) defect	63	5,587	14,983	20,633	42.1%
Any At-fault Vehicle Defect	2	70	238	310	0.6%
Defective brakes	0	19	42	61	0.1%
Defective steering	0	4	13	17	<0.1%
Defective headlights	1	2	3	6	<0.1%
Defective brake lights	0	1	4	5	<0.1%
Defective lighting (unspecified)	0	3	4	7	<0.1%
Defective engine controls/drive train	0	5	21	26	<0.1%
Defective suspension/wheels	0	5	13	18	<0.1%
Defective tires	1	17	39	56	0.1%
Tow hitch/yoke defective	0	1	9	10	<0.1%
Defective exhaust system	0	1	2	3	<0.1%
Hood/tailgate/door/covering opened	0	1	8	9	<0.1%
Defective glazing (obscured windows)	0	2	6	8	<0.1%
Vehicle modifications	0	2	19	22	<0.1%
Fire	0	1	20	20	<0.1%
Overloaded/oversized	0	1	4	5	<0.1%
Load shifted/spilled	0	4	15	19	<0.1%
Jack-knife/trailer swing	0	2	14	16	<0.1%
Hydroplaning tires	0	2	6	7	<0.1%
Any At-fault Environmental Condition	19	1,068	6,100	7,187	14.7%
Animal action - Wild	1	210	3,415	3,626	7.4%
Animal action - Domestic	1	22	149	172	0.4%
Slippery road surface	11	546	1,787	2,343	4.8%
Snow drift	1	30	125	156	0.3%
Obstruction/debris on roadway	0	21	109	130	0.3%
View obstructed/limited	2	86	282	370	0.8%
Glare/reflection	1	29	53	82	0.2%
Construction zone	0	11	25	36	<0.1%
Defective driving surface	1	55	122	177	0.4%
Shoulders defective	0	7	16	24	<0.1%
Lane markings inadequate	0	2	4	5	<0.1%

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Contributing Factor	2003-2007 Average Count of Drivers				
	Fatal	Injury	PDO	Total Drivers	% of Total Victims
Defective/inoperative traffic control device	0	8	9	17	<0.1%
Weather	3	94	205	302	0.6%
Pedestrian corridor in use	0	13	5	18	<0.1%
Uninvolved vehicle	0	25	80	105	0.2%
Uninvolved pedestrian	0	7	12	19	<0.1%
Presence of prior accident	0	9	13	22	<0.1%
No contributing factor(s) identified	16	3,441	13,245	16,702	34.1%
Not applicable/Not stated	0	1	1	2	<0.1%
Total	134	11,316	37,533	48,983	100%

*NOTE: For each vehicle and/or driver involved in a collision, police can record up to three contributing factors. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

In 2008, half of the drivers involved in traffic collisions were recorded as being not at-fault in the collision. Nearly 29% of drivers involved in collisions were noted in the TAR as both "driving properly" and being "apparently normal" at the time of a collision. Another 5% of drivers were noted as "driving properly" and 17% were noted as being in "apparently normal" human condition, while no other at-fault factors were noted in the TAR.

- 37% of drivers involved in a fatal collision were noted as not being at-fault.
- 52% of the drivers in an injury collision were noted as not being at-fault.

At-fault driver actions were recorded for 18% of the drivers involved in traffic collisions in 2008. This is unchanged from the previous five years (2003 to 2007) on average, where 18% of drivers were recorded as being at-fault through some driver action. In 2008:

- 42% of the drivers involved in fatal collisions had an at-fault driver action recorded, including:
 - 14% who were speeding (including "exceeding speed limit", "driving too fast for conditions" and "Unsafe operating speed");
 - 14% who "lost control"; and,
 - 12% where "careless driving" was recorded.
- 22% of the drivers involved in injury collisions had an at-fault driver action recorded, including:
 - 6% who were speeding;
 - 4% who "lost control";
 - 3% who "failed to yield right-of-way";
 - 3% where "careless driving" was recorded; and,
 - 3% where "following too closely" was recorded.
- 16% of the drivers involved in PDO collisions had an at-fault driver action recorded, including:
 - 3% who were speeding;
 - 3% who "failed to yield right-of-way"; and,
 - 2% who "lost control".

At-fault human conditions were recorded for 4% of the drivers involved in traffic collisions in 2008, virtually unchanged from the previous five years (2003 to 2007) on average. In 2008:

- 28% of the drivers involved in fatal collisions had an at-fault human condition recorded, including:
 - 22% who were impaired (including "ability impaired by alcohol", "ability impaired by drugs" and "had been drinking/suspected alcohol use"); and,
 - 4% where "distraction/inattention" was recorded.
- 6% of the drivers involved in injury collisions had an at-fault human condition recorded, including:
 - 1% who were impaired; and,
 - 4% where "distraction/inattention" was recorded.

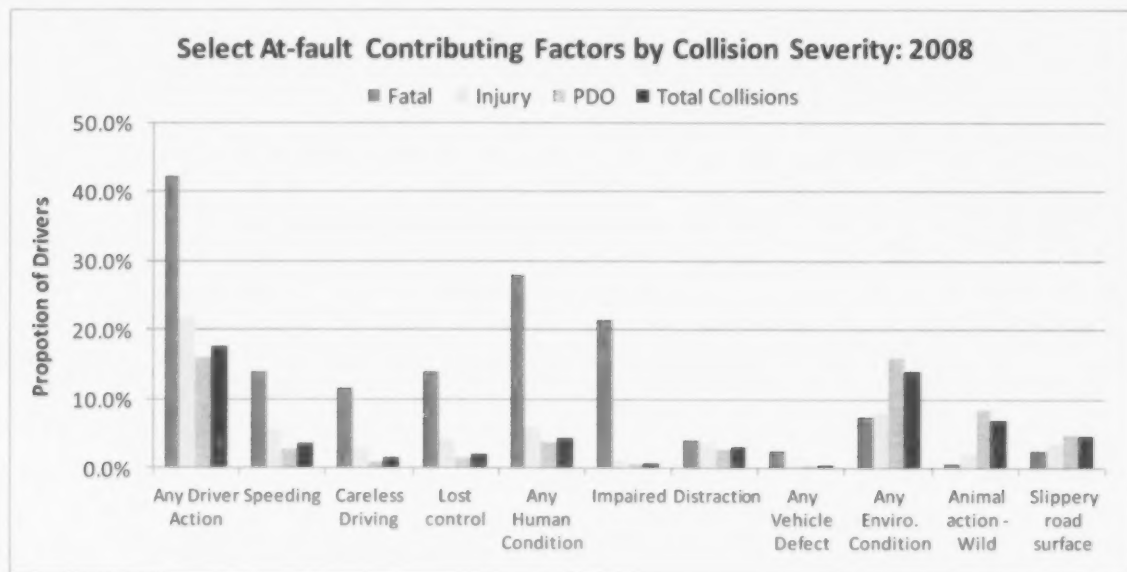
An at-fault vehicle defect was recorded for less than one percent of traffic collisions (just less than 3% of fatal collisions) in 2008 and in the previous five years (2003 to 2007) on average.

Environmental conditions were recorded as contributing factors for 14% of drivers involved in collisions (7% of fatal collisions, 8% of injury collisions and 16% of PDO collisions) in 2008 and 15% of the traffic collisions in the previous five years (2003 to 2007) on average. In 2008:

- 7% of collisions had the action of a wild animal recorded as a contributing factor; and,
- 5% of collisions had "slippery road surface" recorded as a contributing factor.

NOTE: For a detailed historical count of contributing factors recorded for collisions occurring in each year from 2003 to 2008, please refer to "Table 9-9 Historical Summary of Contributing Factors Recorded for Total Collisions: 2003 to 2008" at the end of this section.

Figure 9-1 Select At-fault Contributing Factors by Collision Severity



While many contributing factors are recorded for traffic collisions, in general, there are only a few of these factors recorded that account for a large proportion of traffic collisions in Manitoba. In 2008, at-fault driver actions and human conditions are most often recorded for fatal traffic collisions, with the most frequent of these including impaired driving, speeding, losing control of the vehicle and careless driving. Environmental conditions are recorded most often for PDO collisions.

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Table 9-2 Involvement Rate (per 10,000 Licensed Drivers) in Collisions by Contributing Factors and Collisions Severity

Table 9-2

Driver Involvement Rate (per 10,000 Licensed Drivers) in Collisions by Contributing Factors and Collision Severity: 2008, 2003-2007 Average

Contributing Factor	2008 Collision Severity			2008 Total	2003-2007 Average			
	Fatal	Injury	PDO		Fatal	Injury	PDO	Total
Any At-fault Driver Action	0.7	28.1	67.9	96.7	0.9	32.2	89.7	122.8
Following too closely	<0.1	3.6	9.5	13.1	<0.1	4.7	11.1	15.8
Turning improperly	<0.1	1.5	5.1	6.6	<0.1	2.1	6.6	8.7
Exceeding speed limit	<0.1	0.7	1.0	1.8	0.1	0.8	1.2	2.1
Driving too fast for conditions	<0.1	5.3	10.7	16.0	0.1	4.9	13.9	19.0
Unsafe operating speed (Too fast or too slow)	<0.1	1.4	1.1	2.6	<0.1	0.8	1.6	2.4
Passing improperly	<0.1	0.2	1.3	1.5	<0.1	0.4	1.4	1.8
Changing lanes improperly	<0.1	0.5	3.6	4.1	<0.1	0.7	4.1	4.8
Fail to yield right of way	<0.1	3.9	10.4	14.3	<0.1	5.8	13.4	19.3
Disobey traffic control device/officer	<0.1	2.5	4.1	6.6	<0.1	3.0	4.7	7.8
Drive wrong way on roadway	<0.1	<0.1	0.2	0.3	<0.1	0.2	0.3	0.5
Passing a vehicle at pedestrian X-walk	-	<0.1	-	<0.1	-	<0.1	<0.1	<0.1
Back unsafely	-	0.3	5.8	6.1	-	0.5	13.1	13.6
Parking improperly	-	<0.1	0.4	0.4	<0.1	<0.1	1.0	1.1
Careless Driving	0.2	3.8	4.5	8.5	<0.1	2.9	5.6	8.6
Lost control/Drive off road	0.2	5.7	6.1	12.0	0.2	3.6	6.5	10.4
Driverless vehicle ran out of control	-	-	<0.1	<0.1	<0.1	<0.1	0.1	0.2
Leave stop sign before safe to do so	<0.1	1.5	2.0	3.5	<0.1	1.6	3.1	4.8
Failed to signal	-	<0.1	0.3	0.3	-	<0.1	0.2	0.2
Take avoiding action	<0.1	1.2	3.1	4.4	<0.1	1.4	3.6	4.9
Driver inexperience	<0.1	1.8	4.2	6.1	<0.1	1.8	4.5	6.4
Pedestrian error/confusion	<0.1	0.2	<0.1	0.3	<0.1	0.3	0.2	0.4
Any At-fault Human Condition	0.4	7.8	16.3	24.5	0.6	9.7	19.2	29.4
Loss of consciousness/Blackout prior to collision	<0.1	0.4	0.2	0.6	<0.1	0.4	0.2	0.6
Extreme fatigue/Fell asleep	<0.1	0.6	0.8	1.5	<0.1	0.7	0.9	1.6
Defective eyesight	-	<0.1	0.1	0.2	<0.1	<0.1	0.2	0.3
Defective hearing	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Medical disability	-	<0.1	<0.1	0.2	<0.1	0.1	0.1	0.3

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Contributing Factor	2008 Collision Severity			2008 Total	2003-2007 Average			
	Fatal	Injury	PDO		Fatal	Injury	PDO	Total
Physical disability	-	<0.1	0.2	0.2	<0.1	<0.1	0.2	0.2
Mental disability	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mental confusion/Inability to remember	-	0.1	0.2	0.3	<0.1	0.2	0.3	0.4
Sudden illness	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	0.2
Ability impaired alcohol	0.2	1.1	1.9	3.1	0.2	1.6	2.4	4.1
Ability impaired drugs	<0.1	<0.1	0.1	0.2	<0.1	<0.1	<0.1	0.2
Had been drinking/Suspected alcohol use	0.2	0.7	0.9	1.8	0.2	0.8	1.2	2.2
Distraction/Inattention	<0.1	4.9	11.9	16.8	0.1	6.0	13.9	20.1
Exceed hours of service (commercial drivers only)	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1
Any At-fault Vehicle Defect	<0.1	0.6	2.4	3.0	<0.1	1.0	3.3	4.3
Defective brakes	-	0.1	0.5	0.7	<0.1	0.3	0.6	0.8
Defective steering	-	<0.1	<0.1	0.1	-	<0.1	0.2	0.2
Defective headlights	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Defective brake lights	-	-	0.1	0.1	-	<0.1	<0.1	<0.1
Defective lighting (unspecified)	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	0.1
Defective engine controls/drive train	-	<0.1	0.2	0.2	-	<0.1	0.3	0.4
Defective suspension/wheels	-	<0.1	0.1	0.1	<0.1	<0.1	0.2	0.2
Defective tires	<0.1	<0.1	0.4	0.5	<0.1	0.2	0.5	0.8
Tow hitch/yoke defective	-	<0.1	<0.1	0.1	-	<0.1	0.1	0.1
Defective exhaust system	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1
Hood/tailgate/door/covering opened	-	<0.1	<0.1	0.1	-	<0.1	0.1	0.1
Defective glazing (obscured windows)	-	-	<0.1	<0.1	-	<0.1	<0.1	0.1
Vehicle modifications	-	<0.1	0.2	0.2	<0.1	<0.1	0.3	0.3
Fire	-	-	-	-	-	<0.1	0.3	0.3
Overloaded/oversized	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1
Load shifted/spilled	-	<0.1	0.2	0.3	-	<0.1	0.2	0.3
Jack-knife/trailer swing	-	<0.1	0.1	0.1	<0.1	<0.1	0.2	0.2
Hydroplaning tires	-	<0.1	<0.1	0.1	-	<0.1	<0.1	<0.1

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Contributing Factors

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Contributing Factor	2008 Collision Severity			2008 Total	2003-2007 Average			
	Fatal	Injury	PDO		Fatal	Injury	PDO	Total
Any At-fault Environmental Condition	0.1	10.2	67.6	77.9	0.3	14.8	84.5	99.6
Animal action - Wild	<0.1	2.6	35.6	38.2	<0.1	2.9	47.3	50.2
Animal action - Domestic	-	0.3	1.6	1.9	<0.1	0.3	2.1	2.4
Slippery road surface	<0.1	4.5	21.3	25.8	0.1	7.6	24.8	32.5
Snow drift	-	0.3	1.9	2.2	<0.1	0.4	1.7	2.2
Obstruction/debris on roadway	-	0.2	1.3	1.5	<0.1	0.3	1.5	1.8
View obstructed/limited	<0.1	0.5	2.4	3.0	<0.1	1.2	3.9	5.1
Glare/reflection	<0.1	0.2	0.7	1.0	<0.1	0.4	0.7	1.1
Construction zone	-	<0.1	0.3	0.4	-	0.2	0.3	0.5
Defective driving surface	-	0.4	1.2	1.6	<0.1	0.8	1.7	2.5
Shoulders defective	-	<0.1	0.2	0.2	-	0.1	0.2	0.3
Lane markings inadequate	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1
Defective/inoperative traffic control device	-	<0.1	0.1	0.1	<0.1	0.1	0.1	0.2
Weather	<0.1	0.8	2.9	3.7	<0.1	1.3	2.8	4.2
Pedestrian corridor in use	-	0.2	<0.1	0.2	-	0.2	<0.1	0.2
Uninvolved vehicle	-	0.3	1.0	1.3	-	0.3	1.1	1.5
Uninvolved pedestrian	-	<0.1	0.1	0.2	-	<0.1	0.2	0.3
Presence of prior accident	-	0.1	0.4	0.5	<0.1	0.1	0.2	0.3

Recognizing that counts of drivers involved in collisions could be impacted either positively or negatively by changing population statistics, relative involvement rates per 10,000 licensed drivers is examined to provide a standardized collision rate comparison. This eliminates the effect of changing population size and focuses on the rate at which drivers are involved in collisions instead of simply a raw count of the number of drivers involved overall.

Driver involvement (per 10,000 licensed drivers) in collisions where an at-fault contributing factor has been recorded is generally down in 2008 compared to the previous five years (2003 to 2007) on average. Driver involvement rates for most contributing factors have decreased for total traffic collisions, but some specific factors and/or contributing factors involved in some collision severities have actually increased.

Driver involvement in traffic collisions where an at-fault driver action was recorded is 96.7 in 2008, down 21% from the previous five years (122.8).

- In fatal collisions, driver involvement decreased 24%, down to 0.7 in 2008 from 0.9 in the previous five years.
- In injury collisions, driver involvement decreased 13%, down to 28.1 in 2008 from 32.2 in the previous five years.

Driver involvement in traffic collisions where "speeding" was recorded as a contributing factor is 20.1 in 2008, down nearly 14% from the previous five years (23.2).

- In fatal collisions, driver involvement decreased 36%, down to 0.2 in 2008 from 0.3 in the previous five years.
- In injury collisions, driver involvement actually increased by 13%, up to 7.3 in 2008 from 6.5 in the previous five years.

Driver involvement in traffic collisions where "careless driving" was recorded as a contributing factor is 8.5 in 2008, down less than one percent from the previous five years (8.6). However, driver involvement in collisions with this contributing factor increased by 83% for fatal collisions and 33% for injury collisions. These increases were offset by a 19% decrease in driver involvement in PDO collisions with "careless driving" as a contributing factor.

Driver involvement in traffic collisions where "fail to yield right-of-way" was recorded as a contributing factor is 14.3 in 2008, down 26% from the previous five years (19.3). Driver involvement in injury collisions where this contributing factor was recorded decreased by 33%, down to 3.9 in 2008 from 5.8 in the previous five years.

Driver involvement in traffic collisions where "lost control" was recorded as a contributing factor is 12.0 in 2008, up 15% from the previous five years (10.4). Driver involvement in injury collisions where this contributing factor was recorded increased by 56%, up to 5.7 in 2008 from 3.6 in the previous five years.

Driver involvement in traffic collisions where an at-fault human condition was recorded is 24.5 in 2008, down 17% from the previous five years (29.4).

- In fatal collisions, driver involvement decreased 20%, down to 0.4 in 2008 from 0.6 in the previous five years.
- In injury collisions, driver involvement decreased 20%, down to 7.8 in 2008 from 9.7 in the previous five years.

Driver involvement in traffic collisions where "impaired" was recorded as a contributing factor is 4.9 in 2008, down 27% from the previous five years (6.7).

- In fatal collisions, driver involvement decreased 11%, down to 0.3 in 2008 from 0.4 in the previous five years.
- In injury collisions, driver involvement decreased 37%, down to 1.7 in 2008 from 2.7 in the previous five years.

Driver involvement in traffic collisions where "distraction/inattention" was recorded as a contributing factor is 16.8 in 2008, down 16% from the previous five years (20.1). In injury collisions, driver involvement in collisions with this contributing factor decreased 19%, down to 4.9 in 2008 from 6.0 in the previous five years.

Driver involvement in traffic collisions where "animal action - wild" was recorded as a contributing factor is 38.2 in 2008, down 24% from the previous five years (50.2).

- In injury collisions, driver involvement decreased 10%, down to 2.6 in 2008 from 2.9 in the previous five years.
- In PDO collisions, driver involvement decreased 25%, down to 35.6 in 2008 from 47.3 in the previous five years.

Driver involvement in traffic collisions where "slippery road surface" was recorded as a contributing factor is 25.8 in 2008, down nearly 21% from the previous five years (32.5).

- In injury collisions, driver involvement decreased 40%, down to 4.5 in 2008 from 7.6 in the previous five years.
- In PDO collisions, driver involvement decreased 14%, down to 21.3 in 2008 from 24.8 in the previous five years.

Table 9-3 Drivers Involved in Fatal Collisions by Contributing Factors and Age Group

Table 9-3
Drivers Involved in Fatal Collisions by Contributing Factors and Age Group: 2008

Contributing Factor	Age Group							
	<16	16-19	20-24	25-34	35-44	45-54	55-64	65+
Driver Action - Driving Properly & Human Condition - Apparently Normal	0	1	3	4	1	14	3	2
Driver Action - Driving properly	0	1	1	1	2	0	0	1
Any At-fault Driver Action	0	8	8	5	12	5	8	4
Following too closely	0	0	0	0	0	0	0	1
Turning improperly	0	0	0	0	0	0	1	0
Exceeding speed limit	0	2	5	0	0	0	0	0
Driving too fast for conditions	0	1	1	1	1	1	1	0
Unsafe operating speed (Too fast or too slow)	0	1	1	0	2	1	1	0
Passing improperly	0	0	0	0	0	0	0	1
Changing lanes improperly	0	0	0	0	0	0	0	1
Fail to yield right of way	0	0	2	0	2	0	0	0
Disobey traffic control device/officer	0	0	0	0	1	0	1	0
Drive wrong way on roadway	0	0	0	0	0	0	1	0
Passing a vehicle at pedestrian X-walk	0	0	0	0	0	0	0	0
Back unsafely	0	0	0	0	0	0	0	0
Parking improperly	0	0	0	0	0	0	0	0
Careless Driving	0	4	1	1	4	2	1	1
Lost control/Drive off road	0	2	2	2	7	3	1	0
Driverless vehicle ran out of control	0	0	0	0	0	0	0	0
Leave stop sign before safe to do so	0	0	1	0	0	0	0	0
Failed to signal	0	0	0	0	0	0	0	0
Take avoiding action	0	1	0	1	0	1	1	0
Driver inexperience	0	1	1	0	0	0	0	0
Pedestrian error/confusion	0	0	0	0	0	0	0	0
Human Condition - Apparently Normal	0	1	1	2	1	0	5	1
Any At-fault Human Condition	1	3	5	3	12	3	3	3
Loss of consciousness/Blackout prior to collision	0	0	0	0	1	0	0	0
Extreme fatigue/Fell asleep	0	0	0	1	0	0	0	0
Defective eyesight	0	0	0	0	0	0	0	0
Defective hearing	0	0	0	0	0	0	0	1
Medical disability	0	0	0	0	0	0	0	0
Physical disability	0	0	0	0	0	0	0	0
Mental disability	0	0	0	0	0	0	0	0
Mental confusion/Inability to remember	0	0	0	0	0	0	0	0
Sudden illness	0	0	0	0	0	1	0	1
Ability impaired alcohol	1	1	1	1	4	0	3	0
Ability impaired drugs	0	0	1	0	1	0	0	0
Had been drinking/Suspected alcohol use	0	1	5	1	6	2	0	0
Distraction/Inattention	0	1	0	0	3	0	0	1
Exceed hours of service (commercial drivers only)	0	0	0	0	0	0	0	0
No apparent (vehicle) defect	1	5	4	7	8	15	10	3
Any At-fault Vehicle Defect	0	1	0	0	2	0	0	0
Defective brakes	0	0	0	0	0	0	0	0
Defective steering	0	0	0	0	0	0	0	0
Defective headlights	0	0	0	0	1	0	0	0
Defective brake lights	0	0	0	0	0	0	0	0
Defective lighting (unspecified)	0	0	0	0	0	0	0	0
Defective engine controls/drive train	0	0	0	0	0	0	0	0
Defective suspension/wheels	0	0	0	0	0	0	0	0

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Contributing Factors

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Contributing Factor	Age Group							
	<16	16-19	20-24	25-34	35-44	45-54	55-64	65+
Defective tires	0	1	0	0	0	0	0	0
Tow hitch/yoke defective	0	0	0	0	0	0	0	0
Defective exhaust system	0	0	0	0	1	0	0	0
Hood/tailgate/door/covering opened	0	0	0	0	0	0	0	0
Defective glazing (obscured windows)	0	0	0	0	0	0	0	0
Vehicle modifications	0	0	0	0	0	0	0	0
Fire	0	0	0	0	0	0	0	0
Overloaded/oversized	0	0	0	0	0	0	0	0
Load shifted/spilled	0	0	0	0	0	0	0	0
Jack-knife/trailer swing	0	0	0	0	0	0	0	0
Hydroplaning tires	0	0	0	0	0	0	0	0
Any At-fault Environmental Condition	0	3	1	0	2	1	1	1
Animal action - Wild	0	1	0	0	0	0	0	0
Animal action - Domestic	0	0	0	0	0	0	0	0
Slippery road surface	0	1	0	0	0	1	1	0
Snow drift	0	0	0	0	0	0	0	0
Obstruction/debris on roadway	0	0	0	0	0	0	0	0
View obstructed/limited	0	0	1	0	1	0	0	0
Glare/reflection	0	1	0	0	1	0	0	1
Construction zone	0	0	0	0	0	0	0	0
Defective driving surface	0	0	0	0	0	0	0	0
Shoulders defective	0	0	0	0	0	0	0	0
Lane markings inadequate	0	0	0	0	0	0	0	0
Defective/inoperative traffic control device	0	0	0	0	0	0	0	0
Weather	0	0	0	0	0	0	1	0
Pedestrian corridor in use	0	0	0	0	0	0	0	0
Uninvolved vehicle	0	0	0	0	0	0	0	0
Uninvolved pedestrian	0	0	0	0	0	0	0	0
Presence of prior accident	0	0	0	0	0	0	0	0
No contributing factor(s) identified	0	1	2	4	3	5	2	3
Not applicable/Not stated	0	0	0	0	0	0	0	0
Total	1	12	16	15	25	25	15	11

*NOTE: For each vehicle and/or driver involved in a collision, police can record up to three contributing factors. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

Table 9-3a Drivers Involved in Fatal Collisions by Contributing Factors and Age Group for Previous Five Years

Table 9-3a

Drivers Involved in Fatal Collisions by Contributing Factors and Age Group: 2003-2007 Average

Contributing Factor	Age Group							
	<16	16-19	20-24	25-34	35-44	45-54	55-64	65+
Driver Action - Driving Properly & Human Condition - Apparently Normal	0	2	3	6	7	5	5	4
Driver Action - Driving properly	0	0	0	1	2	1	0	1
Any At-fault Driver Action	1	8	12	12	10	6	4	9
Following too closely	0	0	0	0	0	0	0	0
Turning improperly	0	0	0	0	0	0	0	1
Exceeding speed limit	1	2	4	2	1	0	1	0
Driving too fast for conditions	0	1	1	3	2	1	1	1
Unsafe operating speed (Too fast or too slow)	0	1	1	2	0	1	0	0
Passing improperly	0	0	0	0	1	1	0	0
Changing lanes improperly	0	0	0	0	0	0	0	0
Fail to yield right of way	0	0	1	1	0	1	0	2
Disobey traffic control device/officer	0	0	0	0	1	0	0	1
Drive wrong way on roadway	0	0	1	1	0	0	0	0
Passing a vehicle at pedestrian X-walk	0	0	0	0	0	0	0	0
Back unsafely	0	0	0	0	0	0	0	0
Parking improperly	0	0	0	0	0	0	0	0
Careless Driving	0	1	2	2	1	1	0	0
Lost control/Drive off road	0	3	4	3	3	1	1	2
Driverless vehicle ran out of control	0	0	0	0	0	0	0	0
Leave stop sign before safe to do so	0	0	0	0	0	0	0	1
Failed to signal	0	0	0	0	0	0	0	0
Take avoiding action	0	0	1	0	0	1	0	0
Driver inexperience	0	3	1	1	0	0	0	0
Pedestrian error/confusion	0	0	1	0	1	0	0	0
Human Condition - Apparently Normal	0	2	2	3	3	2	3	4
Any At-fault Human Condition	1	4	9	10	7	3	2	3
Loss of consciousness/Blackout prior to collision	0	0	0	0	1	0	0	0
Extreme fatigue/Fell asleep	0	0	1	1	0	1	0	0
Defective eyesight	0	0	0	0	0	0	0	0
Defective hearing	0	0	0	0	0	0	0	0
Medical disability	0	0	0	0	0	0	0	1
Physical disability	0	0	0	0	0	0	0	0
Mental disability	0	0	0	0	0	0	0	0
Mental confusion/Inability to remember	0	0	0	0	0	0	0	0
Sudden illness	0	0	0	0	0	0	0	0
Ability impaired alcohol	0	2	4	4	2	1	1	0
Ability impaired drugs	0	0	0	0	0	0	0	0
Had been drinking/Suspected alcohol use	0	2	3	4	2	1	0	0
Distraction/Inattention	0	1	2	3	1	1	1	2
Exceed hours of service (commercial drivers only)	0	0	0	0	0	0	0	0
No apparent (vehicle) defect	0	6	8	12	11	9	7	9
Any At-fault Vehicle Defect	0	0	0	0	1	0	0	0
Defective brakes	0	0	0	0	0	0	0	0
Defective steering	0	0	0	0	0	0	0	0
Defective headlights	0	0	0	0	0	0	0	0
Defective brake lights	0	0	0	0	0	0	0	0
Defective lighting (unspecified)	0	0	0	0	0	0	0	0
Defective engine controls/drive train	0	0	0	0	0	0	0	0
Defective suspension/wheels	0	0	0	0	0	0	0	0

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Contributing Factors

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Contributing Factor	Age Group							
	<16	16-19	20-24	25-34	35-44	45-54	55-64	65+
Defective tires	0	0	0	0	1	0	0	0
Tow hitch/yoke defective	0	0	0	0	0	0	0	0
Defective exhaust system	0	0	0	0	0	0	0	0
Hood/tailgate/door/covering opened	0	0	0	0	0	0	0	0
Defective glazing (obscured windows)	0	0	0	0	0	0	0	0
Vehicle modifications	0	0	0	0	0	0	0	0
Fire	0	0	0	0	0	0	0	0
Overloaded/oversized	0	0	0	0	0	0	0	0
Load shifted/spilled	0	0	0	0	0	0	0	0
Jack-knife/trailer swing	0	0	0	0	0	0	0	0
Hydroplaning tires	0	0	0	0	0	0	0	0
Any At-fault Environmental Condition	0	2	3	3	5	2	2	1
Animal action - Wild	0	0	0	0	0	0	0	0
Animal action - Domestic	0	0	0	0	0	0	0	0
Slippery road surface	0	1	1	2	3	1	1	1
Snow drift	0	0	0	0	0	0	0	0
Obstruction/debris on roadway	0	0	0	0	0	0	0	0
View obstructed/limited	0	0	0	0	1	1	0	0
Glare/reflection	0	0	0	0	0	0	0	0
Construction zone	0	0	0	0	0	0	0	0
Defective driving surface	0	0	0	0	0	0	0	0
Shoulders defective	0	0	0	0	0	0	0	0
Lane markings inadequate	0	0	0	0	0	0	0	0
Defective/inoperative traffic control device	0	0	0	0	0	0	0	0
Weather	0	0	1	1	1	0	0	0
Pedestrian corridor in use	0	0	0	0	0	0	0	0
Uninvolved vehicle	0	0	0	0	0	0	0	0
Uninvolved pedestrian	0	0	0	0	0	0	0	0
Presence of prior accident	0	0	0	0	0	0	0	0
No contributing factor(s) identified	0	1	3	2	4	2	2	1
Not applicable/Not stated	0	0	0	0	0	0	0	0
Total	1	13	22	25	26	16	14	16

*NOTE: For each vehicle and/or driver involved in a collision, police can record up to three contributing factors. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

Table 9-4 Drivers Involved in Injury Collisions by Contributing Factors and Age Group

Table 9-4

Drivers Involved in Injury Collisions by Contributing Factors and Age Group: 2008

Contributing Factor	Age Group							
	<16	16-19	20-24	25-34	35-44	45-54	55-64	65+
Driver Action - Driving Properly & Human Condition - Apparently Normal	2	225	318	573	648	611	390	223
Driver Action - Driving properly	0	38	46	81	84	103	67	44
Any At-fault Driver Action	13	332	318	346	296	239	169	171
Following too closely	0	30	35	37	36	25	14	19
Turning improperly	1	9	18	18	19	16	13	8
Exceeding speed limit	0	16	13	12	4	6	1	0
Driving too fast for conditions	3	77	60	77	67	46	28	16
Unsafe operating speed (Too fast or too slow)	0	31	19	20	20	4	8	4
Passing improperly	0	3	2	3	2	3	1	3
Changing lanes improperly	0	4	5	2	6	4	2	5
Fail to yield right of way	0	22	44	36	39	42	39	34
Disobey traffic control device/officer	2	18	30	29	21	20	13	17
Drive wrong way on roadway	0	0	2	1	2	0	1	1
Passing a vehicle at pedestrian X-walk	0	1	1	0	0	0	0	1
Back unsafely	0	6	1	5	2	2	2	2
Parking improperly	0	1	1	0	0	0	0	0
Careless Driving	1	56	41	51	34	32	22	12
Lost control/Drive off road	3	92	65	91	63	53	33	29
Driverless vehicle ran out of control	0	0	0	0	0	0	0	0
Leave stop sign before safe to do so	0	13	11	22	16	10	6	29
Failed to signal	0	1	2	0	0	0	0	0
Take avoiding action	0	13	11	21	14	14	15	6
Driver inexperience	9	78	24	13	8	1	2	1
Pedestrian error/confusion	0	2	4	3	2	1	2	3
Human Condition - Apparently Normal	6	176	198	225	253	229	156	114
Any At-fault Human Condition	2	75	95	106	90	65	51	57
Loss of consciousness/Blackout prior to collision	0	2	5	5	4	4	4	4
Extreme fatigue/Fell asleep	0	5	11	14	4	5	3	6
Defective eyesight	0	1	1	1	1	1	1	0
Defective hearing	0	0	0	0	0	0	1	0
Medical disability	0	1	0	0	2	2	1	1
Physical disability	0	0	0	0	0	1	1	1
Mental disability	0	0	0	2	0	0	0	1
Mental confusion/Inability to remember	0	0	0	2	2	2	1	3
Sudden illness	0	2	1	0	1	1	1	0
Ability impaired alcohol	1	11	15	10	20	14	5	2
Ability impaired drugs	0	0	3	2	1	0	0	0
Had been drinking/Suspected alcohol use	0	5	12	14	6	5	2	0
Distraction/Inattention	1	50	53	62	55	36	34	41
Exceed hours of service (commercial drivers only)	0	0	0	0	0	0	0	0
No apparent (vehicle) defect	9	398	511	787	855	775	528	349
Any At-fault Vehicle Defect	0	4	4	10	12	6	4	4
Defective brakes	0	3	0	2	4	0	1	1
Defective steering	0	0	1	1	0	0	0	1
Defective headlights	0	0	0	0	0	0	0	0
Defective brake lights	0	0	0	0	0	0	0	0
Defective lighting (unspecified)	0	0	0	0	0	1	0	0
Defective engine controls/drive train	0	0	0	1	2	0	0	1
Defective suspension/wheels	0	0	0	0	1	1	1	0

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Contributing Factors

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Contributing Factor	Age Group							
	<16	16-19	20-24	25-34	35-44	45-54	55-64	65+
Defective tires	0	1	1	3	0	1	0	0
Tow hitch/yoke defective	0	0	0	1	1	1	0	0
Defective exhaust system	0	0	1	0	0	0	0	0
Hood/tailgate/door/covering opened	0	0	0	1	1	2	0	0
Defective glazing (obscured windows)	0	0	0	0	0	0	0	0
Vehicle modifications	0	0	0	0	1	0	0	0
Fire	0	0	0	0	0	0	0	0
Overloaded/oversized	0	0	0	0	0	0	0	0
Load shifted/spilled	0	0	0	1	2	0	1	1
Jack-knife/trailer swing	0	0	0	0	0	1	0	0
Hydroplaning tires	0	0	1	0	0	0	1	0
Any At-fault Environmental Condition	3	103	113	135	134	147	77	47
Animal action - Wild	1	28	22	35	38	40	25	10
Animal action - Domestic	0	6	7	6	3	2	1	0
Slippery road surface	2	40	55	60	55	67	30	21
Snow drift	0	6	6	3	6	2	3	0
Obstruction/debris on roadway	0	1	5	3	5	2	0	2
View obstructed/limited	1	2	5	6	6	12	4	5
Glare/reflection	0	3	0	1	4	4	3	2
Construction zone	0	0	2	1	1	2	0	0
Defective driving surface	0	12	3	5	2	5	4	1
Shoulders defective	0	0	1	0	1	0	0	1
Lane markings inadequate	0	1	0	1	1	0	0	0
Defective/inoperative traffic control device	0	0	0	0	0	1	0	0
Weather	0	8	13	12	8	8	7	3
Pedestrian corridor in use	0	2	3	3	1	0	0	2
Uninvolved vehicle	0	4	4	2	2	6	2	1
Uninvolved pedestrian	0	0	0	0	2	1	0	0
Presence of prior accident	0	1	1	3	4	0	1	0
No contributing factor(s) identified	5	162	238	375	397	350	216	149
Not applicable/Not stated	0	0	0	0	0	0	0	0
Total	22	863	1048	1564	1634	1510	967	654

*NOTE: For each vehicle and/or driver involved in a collision, police can record up to three contributing factors. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

Table 9-4a Drivers Involved in Injury Collisions by Contributing Factors and Age Group for Previous Five Years

Table 9-4a

Drivers Involved in Injury Collisions by Contributing Factors and Age Group: 2003-2007 Average

Contributing Factor	Age Group							
	<16	16-19	20-24	25-34	35-44	45-54	55-64	65+
Driver Action - Driving Properly & Human Condition - Apparently Normal	3	277	431	764	896	771	451	284
Driver Action - Driving properly	0	39	52	78	103	85	49	34
Any At-fault Driver Action	15	368	314	365	348	278	169	185
Following too closely	0	43	37	48	48	42	20	19
Turning improperly	0	23	17	22	20	20	13	19
Exceeding speed limit	2	17	16	10	7	3	2	0
Driving too fast for conditions	3	64	61	65	56	39	23	13
Unsafe operating speed (Too fast or too slow)	1	15	11	10	7	4	3	2
Passing improperly	0	6	4	5	4	4	3	3
Changing lanes improperly	0	5	6	7	7	6	4	3
Fail to yield right of way	1	48	48	61	70	56	40	51
Disobey traffic control device/officer	1	22	29	35	30	25	17	25
Drive wrong way on roadway	0	1	1	2	3	1	1	2
Passing a vehicle at pedestrian X-walk	0	1	1	1	1	0	0	0
Back unsafely	0	3	5	5	6	4	4	3
Parking improperly	0	0	0	0	1	1	1	1
Careless Driving	3	32	27	27	25	19	8	11
Lost control/Drive off road	5	56	44	47	41	33	18	16
Driverless vehicle ran out of control	0	1	0	0	1	0	0	0
Leave stop sign before safe to do so	0	12	14	19	17	18	9	20
Failed to signal	0	0	0	0	1	0	1	0
Take avoiding action	0	16	15	20	20	13	12	3
Driver inexperience	7	82	15	11	6	2	2	1
Pedestrian error/confusion	0	3	3	4	3	3	2	1
Human Condition - Apparently Normal	4	218	212	288	304	256	158	137
Any At-fault Human Condition	3	110	110	116	110	86	50	67
Loss of consciousness/Blackout prior to collision	0	3	4	2	5	7	4	5
Extreme fatigue/Fell asleep	0	13	11	8	6	4	3	4
Defective eyesight	0	0	0	0	0	1	0	3
Defective hearing	0	0	0	0	0	0	0	1
Medical disability	0	0	0	1	1	1	1	3
Physical disability	0	0	0	1	0	1	0	1
Mental disability	0	0	0	0	1	1	0	0
Mental confusion/Inability to remember	0	1	1	1	1	1	1	7
Sudden illness	0	0	0	0	2	1	1	1
Ability impaired alcohol	1	15	22	27	24	11	5	2
Ability impaired drugs	0	2	1	1	1	1	1	0
Had been drinking/Suspected alcohol use	0	11	15	11	10	6	2	1
Distraction/Inattention	2	69	61	70	65	56	33	43
Exceed hours of service (commercial drivers only)	0	0	0	0	0	0	0	0
No apparent (vehicle) defect	9	496	639	1014	1149	987	581	430
Any At-fault Vehicle Defect	1	12	12	13	11	10	3	5
Defective brakes	0	3	4	3	2	2	1	2
Defective steering	0	0	1	0	1	1	0	0
Defective headlights	0	0	0	1	0	0	0	0
Defective brake lights	0	0	0	0	0	0	0	0
Defective lighting (unspecified)	0	1	1	0	0	0	0	0
Defective engine controls/drive train	0	0	1	2	1	0	0	1
Defective suspension/wheels	0	1	1	1	0	1	0	0

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Contributing Factors

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Contributing Factor	Age Group							
	<16	16-19	20-24	25-34	35-44	45-54	55-64	65+
Defective tires	0	6	7	8	1	4	4	2
Tow hitch/yoke defective	0	0	0	2	1	1	1	0
Defective exhaust system	0	0	0	0	0	0	0	0
Hood/tailgate/door/covering opened	0	0	1	2	1	2	1	0
Defective glazing (obscured windows)	0	0	2	0	1	1	1	0
Vehicle modifications	0	2	5	4	0	3	2	0
Fire	0	0	0	0	0	0	0	0
Overloaded/oversized	0	0	0	1	0	1	0	0
Load shifted/spilled	0	1	1	3	1	4	3	1
Jack-knife/trailer swing	0	0	0	4	2	4	0	0
Hydroplaning tires	0	2	3	0	0	0	1	0
Any At-fault Environmental Condition	1	600	642	828	915	1052	648	387
Animal action - Wild	0	207	290	411	529	667	406	215
Animal action - Domestic	0	17	16	11	24	24	18	12
Slippery road surface	1	276	242	297	258	246	143	102
Snow drift	0	17	23	27	28	28	13	7
Obstruction/debris on roadway	0	16	14	17	10	18	9	7
View obstructed/limited	0	25	21	24	34	35	16	18
Glare/reflection	0	5	5	10	6	12	10	5
Construction zone	0	2	1	4	5	6	2	5
Defective driving surface	0	18	14	20	14	13	9	4
Shoulders defective	0	0	4	1	3	2	1	3
Lane markings inadequate	0	0	0	0	2	0	0	0
Defective/inoperative traffic control device	0	1	2	1	4	0	0	1
Weather	0	30	26	50	34	28	28	18
Pedestrian corridor in use	0	0	0	2	1	0	0	0
Uninvolved vehicle	0	10	13	8	11	11	10	2
Uninvolved pedestrian	0	3	2	1	2	2	0	0
Presence of prior accident	0	3	4	4	7	6	2	1
No contributing factor(s) identified	6	593	694	1131	1106	1138	727	598
Not applicable/Not stated/Not stated	0	0	0	0	0	0	0	0
Total	23	2732	3135	4507	4590	4882	3142	2541

*NOTE: For each vehicle and/or driver involved in a collision, police can record up to three contributing factors. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

Table 9-5 Drivers Involved in PDO Collisions by Contributing Factors and Age Group

Table 9-5

Drivers Involved in PDO Collisions by Contributing Factors and Age Group: 2008

Contributing Factor	Age Group							
	<16	16-19	20-24	25-34	35-44	45-54	55-64	65+
Driver Action - Driving Properly & Human Condition - Apparently Normal	5	676	989	1545	1661	1791	1113	833
Driver Action - Driving properly	1	116	176	242	291	339	189	175
Any At-fault Driver Action	11	813	672	780	652	600	440	475
Following too closely	1	81	86	120	97	95	61	40
Turning improperly	2	44	45	44	52	38	39	51
Exceeding speed limit	1	16	18	10	8	6	2	2
Driving too fast for conditions	0	162	155	133	106	93	55	40
Unsafe operating speed (Too fast or too slow)	0	18	13	11	9	13	3	2
Passing improperly	0	8	14	16	15	10	9	10
Changing lanes improperly	1	34	31	37	26	28	20	35
Fail to yield right of way	0	89	73	106	106	71	89	110
Disobey traffic control device/officer	0	23	28	40	35	40	25	41
Drive wrong way on roadway	0	1	3	3	0	1	1	3
Passing a vehicle at pedestrian X-walk	0	0	0	0	0	0	0	0
Back unsafely	2	45	43	60	48	68	57	58
Parking improperly	0	0	1	7	5	3	3	8
Careless Driving	1	49	52	52	44	41	22	24
Lost control/Drive off road	0	95	72	98	68	47	34	33
Driverless vehicle ran out of control	0	1	0	1	1	2	1	0
Leave stop sign before safe to do so	0	22	12	27	14	25	15	22
Failed to signal	0	1	2	4	2	3	3	2
Take avoiding action	0	38	43	44	29	43	20	17
Driver inexperience	6	193	47	29	15	11	5	4
Pedestrian error/confusion	0	2	3	0	0	1	1	0
Human Condition - Apparently Normal	4	670	638	810	754	778	588	475
Any At-fault Human Condition	4	176	191	192	155	165	110	139
Loss of consciousness/Blackout prior to collision	0	0	1	3	2	3	3	4
Extreme fatigue/Fell asleep	0	11	11	11	7	13	6	4
Defective eyesight	0	0	1	0	1	1	2	3
Defective hearing	0	0	0	0	0	0	0	2
Medical disability	0	0	0	0	0	0	1	3
Physical disability	0	1	1	4	2	0	1	5
Mental disability	0	0	0	0	0	1	0	2
Mental confusion/Inability to remember	0	1	0	2	0	1	1	6
Sudden illness	0	0	1	0	2	1	2	1
Ability impaired alcohol	2	20	28	38	20	16	9	0
Ability impaired drugs	0	0	3	0	2	1	0	0
Had been drinking/Suspected alcohol use	0	13	19	14	8	5	1	1
Distraction/Inattention	2	131	132	122	115	126	86	110
Exceed hours of service (commercial drivers only)	0	0	0	0	1	0	0	0
No apparent (vehicle) defect	9	1190	1417	2006	2097	2142	1437	1181
Any At-fault Vehicle Defect	0	22	32	34	20	36	16	8
Defective brakes	0	10	5	4	3	9	3	3
Defective steering	0	1	2	1	1	1	0	1
Defective headlights	0	0	2	0	0	0	0	0
Defective brake lights	0	0	1	2	0	0	0	1
Defective lighting (unspecified)	0	1	0	0	1	0	0	0
Defective engine controls/drive train	0	0	1	2	5	4	0	1
Defective suspension/wheels	0	0	2	1	3	2	0	0

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Contributing Factors

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Contributing Factor	Age Group							
	<16	16-19	20-24	25-34	35-44	45-54	55-64	65+
Defective tires	0	6	7	8	1	4	4	2
Tow hitch/yoke defective	0	0	0	2	1	1	1	0
Defective exhaust system	0	0	0	0	0	0	0	0
Hood/tailgate/door/covering opened	0	0	1	2	1	2	1	0
Defective glazing (obscured windows)	0	0	2	0	1	1	1	0
Vehicle modifications	0	2	5	4	0	3	2	0
Fire	0	0	0	0	0	0	0	0
Overloaded/oversized	0	0	0	1	0	1	0	0
Load shifted/spilled	0	1	1	3	1	4	3	1
Jack-knife/trailer swing	0	0	0	4	2	4	0	0
Hydroplaning tires	0	2	3	0	0	0	1	0
Any At-fault Environmental Condition	1	600	642	828	915	1052	648	387
Animal action - Wild	0	207	290	411	529	667	406	215
Animal action - Domestic	0	17	16	11	24	24	18	12
Slippery road surface	1	276	242	297	258	246	143	102
Snow drift	0	17	23	27	28	28	13	7
Obstruction/debris on roadway	0	16	14	17	10	18	9	7
View obstructed/limited	0	25	21	24	34	35	16	18
Glare/reflection	0	5	5	10	6	12	10	5
Construction zone	0	2	1	4	5	6	2	5
Defective driving surface	0	18	14	20	14	13	9	4
Shoulders defective	0	0	4	1	3	2	1	3
Lane markings inadequate	0	0	0	0	2	0	0	0
Defective/inoperative traffic control device	0	1	2	1	4	0	0	1
Weather	0	30	26	50	34	28	28	18
Pedestrian corridor in use	0	0	0	2	1	0	0	0
Uninvolved vehicle	0	10	13	8	11	11	10	2
Uninvolved pedestrian	0	3	2	1	2	2	0	0
Presence of prior accident	0	3	4	4	7	6	2	1
No contributing factor(s) identified	6	593	694	1131	1106	1138	727	598
Not applicable/Not stated/Not stated	0	0	0	0	0	0	0	0
Total	23	2732	3135	4507	4590	4882	3142	2541

*NOTE: For each vehicle and/or driver involved in a collision, police can record up to three contributing factors. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

Table 9-5a Drivers Involved in PDO Collisions by Contributing Factors and Age Group for Previous Five Years

Table 9-5a

Drivers Involved in PDO Collisions by Contributing Factors and Age Group: 2003-2007 Average

Contributing Factor	Age Group							
	<16	16-19	20-24	25-34	35-44	45-54	55-64	65+
Driver Action - Driving Properly & Human Condition - Apparently Normal	7	981	1219	1875	2206	2126	1313	1030
Driver Action - Driving properly	1	148	148	247	287	297	181	152
Any At-fault Driver Action	32	1053	791	891	887	789	539	648
Following too closely	0	122	97	112	128	102	63	49
Turning improperly	2	58	46	57	60	64	44	70
Exceeding speed limit	2	27	19	12	7	5	3	1
Driving too fast for conditions	5	207	173	173	140	116	65	44
Unsafe operating speed (Too fast or too slow)	2	29	20	17	11	8	5	4
Passing improperly	0	14	13	15	10	12	8	8
Changing lanes improperly	1	39	32	30	31	32	23	44
Fail to yield right of way	1	119	102	117	125	126	95	141
Disobey traffic control device/officer	1	35	42	44	39	39	26	38
Drive wrong way on roadway	0	2	3	2	2	1	1	4
Passing a vehicle at pedestrian X-walk	0	0	0	0	0	0	0	0
Back unsafely	2	107	78	117	149	135	102	125
Parking improperly	1	7	5	7	10	10	9	17
Careless Driving	4	60	50	57	52	37	27	28
Lost control/Drive off road	4	111	85	81	66	50	29	29
Driverless vehicle ran out of control	0	0	1	2	1	2	1	1
Leave stop sign before safe to do so	0	32	22	24	32	26	24	46
Failed to signal	0	1	1	2	2	2	2	2
Take avoiding action	0	41	37	46	47	41	25	15
Driver inexperience	17	201	40	25	15	10	5	3
Pedestrian error/confusion	0	1	1	2	1	2	1	2
Human Condition - Apparently Normal	14	754	620	807	884	805	544	522
Any At-fault Human Condition	7	212	205	212	203	175	121	154
Loss of consciousness/Blackout prior to collision	0	1	2	2	2	2	1	3
Extreme fatigue/Fell asleep	0	14	15	10	8	7	5	4
Defective eyesight	0	2	1	2	1	1	1	4
Defective hearing	0	0	0	0	0	0	0	2
Medical disability	0	0	1	1	2	1	1	4
Physical disability	0	2	1	1	2	1	1	5
Mental disability	0	1	0	0	1	1	0	1
Mental confusion/Inability to remember	0	1	2	1	1	1	1	12
Sudden illness	0	0	1	0	0	1	1	1
Ability impaired alcohol	1	24	33	37	30	23	9	5
Ability impaired drugs	0	1	1	1	2	0	0	1
Had been drinking/Suspected alcohol use	1	13	21	17	11	9	5	3
Distraction/Inattention	4	157	134	146	145	132	96	116
Exceed hours of service (commercial drivers only)	0	0	0	0	1	0	0	0
No apparent (vehicle) defect	25	1567	1671	2376	2716	2548	1625	1457
Any At-fault Vehicle Defect	1	39	31	44	45	33	22	15
Defective brakes	0	7	5	8	8	6	3	2
Defective steering	0	3	2	2	2	2	2	1
Defective headlights	0	1	1	0	0	0	0	0
Defective brake lights	0	1	1	0	1	0	1	0
Defective lighting (unspecified)	0	1	0	1	0	1	0	0
Defective engine controls/drive train	0	4	2	4	3	2	2	3
Defective suspension/wheels	0	2	2	2	2	2	2	1

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Contributing Factors

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Contributing Factor	Age Group							
	<16	16-19	20-24	25-34	35-44	45-54	55-64	65+
Defective tires	0	10	6	8	7	4	1	1
Tow hitch/yoke defective	0	0	1	2	3	1	1	1
Defective exhaust system	0	0	1	0	0	0	0	0
Hood/tailgate/door/covering opened	0	1	1	0	2	2	1	1
Defective glazing (obscured windows)	0	1	2	0	1	1	0	1
Vehicle modifications	0	3	2	5	4	2	2	1
Fire	0	2	2	4	4	3	2	2
Overloaded/oversized	0	0	1	1	2	2	1	0
Load shifted/spilled	0	0	1	2	4	3	2	1
Jack-knife/trailer swing	0	1	1	3	2	2	3	0
Hydroplaning tires	0	69	82	126	173	158	87	58
Any At-fault Environmental Condition	5	727	704	1042	1229	1188	674	450
Animal action - Wild	1	234	270	438	583	614	353	203
Animal action - Domestic	0	14	16	26	24	18	11	9
Slippery road surface	2	291	255	325	322	269	153	111
Snow drift	0	22	17	27	22	18	11	7
Obstruction/debris on roadway	0	12	14	22	18	20	11	9
View obstructed/limited	1	37	25	46	53	52	30	31
Glare/reflection	0	6	5	10	8	8	5	9
Construction zone	0	3	4	2	5	4	2	3
Defective driving surface	0	31	16	20	20	22	6	6
Shoulders defective	0	2	1	3	5	2	2	1
Lane markings inadequate	0	0	0	0	1	1	1	0
Defective/inoperative traffic control device	0	2	2	1	2	1	1	0
Weather	0	28	24	39	38	39	18	15
Pedestrian corridor in use	0	1	1	0	1	1	1	0
Uninvolved vehicle	0	12	8	13	12	18	9	6
Uninvolved pedestrian	0	1	1	2	3	3	0	1
Presence of prior accident	0	1	1	2	2	3	2	2
No contributing factor(s) identified	15	719	773	1114	1236	1127	755	701
Not applicable/Not stated/Not stated	0	0	0	0	0	0	0	0
Total	60	3442	3482	4952	5595	5263	3350	2931

*NOTE: For each vehicle and/or driver involved in a collision, police can record up to three contributing factors. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

Table 9-6 Drivers Involved in All Traffic Collisions by Contributing Factors and Age Group

Table 9-6

Drivers Involved in All Traffic Collisions by Contributing Factors and Age Group: 2008

Contributing Factor	Age Group							
	<16	16-19	20-24	25-34	35-44	45-54	55-64	65+
Driver Action - Driving Properly & Human Condition - Apparently Normal	7	902	1310	2122	2310	2416	1506	1058
Driver Action - Driving properly	1	155	223	324	377	442	256	220
Any At-fault Driver Action	24	1153	998	1131	960	844	617	650
Following too closely	1	111	121	157	133	120	75	60
Turning improperly	3	53	63	62	71	54	53	59
Exceeding speed limit	1	34	36	22	12	12	3	2
Driving too fast for conditions	3	240	216	211	174	140	84	56
Unsafe operating speed (Too fast or too slow)	0	50	33	31	31	18	12	6
Passing improperly	0	11	16	19	17	13	10	14
Changing lanes improperly	1	38	36	39	32	32	22	41
Fail to yield right of way	0	111	119	142	147	113	128	144
Disobey traffic control device/officer	2	41	58	69	57	60	39	58
Drive wrong way on roadway	0	1	5	4	2	1	3	4
Passing a vehicle at pedestrian X-walk	0	1	1	0	0	0	0	1
Back unsafely	2	51	44	65	50	70	59	60
Parking improperly	0	1	2	7	5	3	3	8
Careless Driving	2	109	94	104	82	75	45	37
Lost control/Drive off road	3	189	139	191	138	103	68	62
Driverless vehicle ran out of control	0	1	0	1	1	2	1	0
Leave stop sign before safe to do so	0	35	24	49	30	35	21	51
Failed to signal	0	2	4	4	2	3	3	2
Take avoiding action	0	52	54	66	43	58	36	23
Driver inexperience	15	272	72	42	23	12	7	5
Pedestrian error/confusion	0	4	7	3	2	2	3	3
Human Condition - Apparently Normal	10	847	837	1037	1008	1007	749	590
Any At-fault Human Condition	7	254	291	301	257	233	164	199
Loss of consciousness/Blackout prior to collision	0	2	6	8	7	7	7	8
Extreme fatigue/Fell asleep	0	16	22	26	11	18	9	10
Defective eyesight	0	1	2	1	2	2	3	3
Defective hearing	0	0	0	0	0	0	1	3
Medical disability	0	1	0	0	2	2	2	4
Physical disability	0	1	1	4	2	1	2	6
Mental disability	0	0	0	2	0	1	0	3
Mental confusion/Inability to remember	0	1	0	4	2	3	2	9
Sudden illness	0	2	2	0	3	3	3	2
Ability impaired alcohol	4	32	44	49	44	30	17	2
Ability impaired drugs	0	0	7	2	4	1	0	0
Had been drinking/Suspected alcohol use	0	19	36	29	20	12	3	1
Distraction/Inattention	3	182	185	184	173	162	120	152
Exceed hours of service (commercial drivers only)	0	0	0	0	1	0	0	0
No apparent (vehicle) defect	19	1593	1932	2800	2960	2932	1975	1533
Any At-fault Vehicle Defect	0	27	36	44	34	42	20	12
Defective brakes	0	13	5	6	7	9	4	4
Defective steering	0	1	3	2	1	1	0	2
Defective headlights	0	0	2	0	1	0	0	0
Defective brake lights	0	0	1	2	0	0	0	1
Defective lighting (unspecified)	0	1	0	0	1	1	0	0
Defective engine controls/drive train	0	0	1	3	7	4	0	2
Defective suspension/wheels	0	0	2	1	4	3	1	0

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Contributing Factor	Age Group							
	<16	16-19	20-24	25-34	35-44	45-54	55-64	65+
Defective tires	0	8	8	11	1	5	4	2
Tow hitch/yoke defective	0	0	0	3	2	2	1	0
Defective exhaust system	0	0	1	0	1	0	0	0
Hood/tailgate/door/covering opened	0	0	1	3	2	4	1	0
Defective glazing (obscured windows)	0	0	2	0	1	1	1	0
Vehicle modifications	0	2	5	4	1	3	2	0
Fire	0	0	0	0	0	0	0	0
Overloaded/oversized	0	0	0	1	0	1	0	0
Load shifted/spilled	0	1	1	4	3	4	4	2
Jack-knife/trailer swing	0	0	0	4	2	5	0	0
Hydroplaning tires	0	2	4	0	0	0	2	0
Any At-fault Environmental Condition	4	706	756	963	1051	1200	726	435
Animal action - Wild	1	236	312	447	567	707	431	225
Animal action - Domestic	0	23	23	17	27	26	19	12
Slippery road surface	3	317	297	357	313	314	174	123
Snow drift	0	23	29	30	34	30	16	7
Obstruction/debris on roadway	0	17	19	20	15	20	9	9
View obstructed/limited	1	27	27	30	41	47	20	23
Glare/reflection	0	9	5	11	11	16	13	8
Construction zone	0	2	3	5	6	8	2	5
Defective driving surface	0	30	17	25	16	18	13	5
Shoulders defective	0	0	5	1	4	2	1	4
Lane markings inadequate	0	1	0	1	3	0	0	0
Defective/inoperative traffic control device	0	1	2	1	4	1	0	1
Weather	0	38	39	62	42	36	36	21
Pedestrian corridor in use	0	2	3	5	2	0	0	2
Uninvolved vehicle	0	14	17	10	13	17	12	3
Uninvolved pedestrian	0	3	2	1	4	3	0	0
Presence of prior accident	0	4	5	7	11	6	3	1
No contributing factor(s) identified	11	756	934	1510	1506	1493	945	750
Not applicable/Not stated	0	0	0	0	0	0	0	0
Total	46	3607	4199	6086	6249	6417	4124	3206

*NOTE: For each vehicle and/or driver involved in a collision, police can record up to three contributing factors. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

Table 9-6a Drivers Involved in All Traffic Collisions by Contributing Factors and Age Group for Previous Five Years

Table 9-6a

Drivers Involved in All Traffic Collisions by Contributing Factors and Age Group: 2003-2007 Average

Contributing Factor	Age Group							
	<16	16-19	20-24	25-34	35-44	45-54	55-64	65+
Driver Action - Driving Properly & Human Condition - Apparently Normal	10	1260	1653	2645	3109	2902	1769	1317
Driver Action - Driving properly	2	187	199	325	392	383	229	187
Any At-fault Driver Action	47	1429	1118	1269	1245	1073	712	842
Following too closely	0	165	134	161	176	144	83	69
Turning improperly	2	81	63	79	81	85	58	90
Exceeding speed limit	5	45	38	24	15	7	5	2
Driving too fast for conditions	7	272	236	241	198	156	88	59
Unsafe operating speed (Too fast or too slow)	3	45	32	29	18	13	9	6
Passing improperly	0	20	16	20	15	17	12	12
Changing lanes improperly	1	45	39	37	39	38	27	47
Fail to yield right of way	2	168	150	178	195	183	136	194
Disobey traffic control device/officer	2	58	71	80	71	64	43	65
Drive wrong way on roadway	1	4	5	5	5	3	2	6
Passing a vehicle at pedestrian X-walk	0	2	1	1	1	0	1	0
Back unsafely	2	110	83	122	155	139	106	127
Parking improperly	1	8	5	7	11	11	10	18
Careless Driving	8	92	79	86	78	58	35	39
Lost control/Drive off road	9	169	133	132	109	84	48	47
Driverless vehicle ran out of control	0	1	1	2	2	2	1	1
Leave stop sign before safe to do so	0	44	35	43	50	44	33	67
Failed to signal	0	2	1	2	2	2	2	2
Take avoiding action	0	56	53	66	67	55	37	18
Driver inexperience	25	285	56	36	21	12	6	4
Pedestrian error/confusion	0	4	5	6	5	5	3	3
Human Condition - Apparently Normal	18	974	834	1099	1191	1064	705	663
Any At-fault Human Condition	10	326	324	339	319	264	174	225
Loss of consciousness/Blackout prior to collision	0	4	6	3	8	9	5	8
Extreme fatigue/Fell asleep	0	27	26	19	15	12	8	9
Defective eyesight	0	2	1	2	2	2	1	7
Defective hearing	0	0	0	0	0	0	0	3
Medical disability	0	1	1	2	3	2	3	8
Physical disability	0	2	1	2	3	2	2	6
Mental disability	0	1	0	0	1	1	1	1
Mental confusion/Inability to remember	0	2	3	1	2	2	2	19
Sudden illness	0	1	1	1	2	2	3	3
Ability impaired alcohol	2	41	59	68	57	35	16	7
Ability impaired drugs	0	3	2	3	3	1	1	1
Had been drinking/Suspected alcohol use	1	26	39	31	23	16	7	4
Distraction/Inattention	6	226	196	219	211	189	130	160
Exceed hours of service (commercial drivers only)	0	0	0	0	1	0	0	0
No apparent (vehicle) defect	34	2069	2318	3402	3876	3544	2214	1897
Any At-fault Vehicle Defect	1	51	43	57	57	43	26	19
Defective brakes	0	10	10	11	11	8	3	4
Defective steering	0	3	3	2	3	3	2	1
Defective headlights	0	1	1	1	0	1	0	0
Defective brake lights	0	1	1	1	1	0	1	0
Defective lighting (unspecified)	0	1	1	2	1	1	0	1
Defective engine controls/drive train	0	4	3	6	4	2	2	3
Defective suspension/wheels	0	3	3	3	2	3	2	1

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Section 9

Contributing Factors

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Contributing Factor	Age Group							
	<16	16-19	20-24	25-34	35-44	45-54	55-64	65+
Defective tires	0	14	9	10	10	7	2	2
Tow hitch/yoke defective	0	0	1	3	3	1	1	1
Defective exhaust system	0	1	1	0	0	0	0	0
Hood/tailgate/door/covering opened	0	1	1	1	2	2	1	1
Defective glazing (obscured windows)	0	2	2	1	1	1	0	1
Vehicle modifications	0	3	3	6	5	3	2	1
Fire	0	2	2	4	4	4	2	2
Overloaded/oversized	0	0	1	1	2	2	1	0
Load shifted/spilled	0	1	1	2	5	4	2	1
Jack-knife/trailer swing	0	1	1	4	3	2	4	0
Hydroplaning tires	0	69	82	127	173	158	87	58
Any At-fault Environmental Condition	7	879	846	1255	1449	1358	775	516
Animal action - Wild	2	262	296	478	633	650	374	211
Animal action - Domestic	0	17	18	30	29	22	13	10
Slippery road surface	2	363	330	439	438	357	200	143
Snow drift	0	26	22	34	29	22	13	9
Obstruction/debris on roadway	0	16	17	27	21	23	13	11
View obstructed/limited	1	48	36	60	69	66	39	39
Glare/reflection	0	10	10	14	14	12	8	12
Construction zone	0	4	5	4	7	6	4	4
Defective driving surface	1	45	24	33	27	28	11	8
Shoulders defective	0	4	2	5	6	2	3	2
Lane markings inadequate	0	1	0	1	1	1	1	0
Defective/inoperative traffic control device	0	3	3	2	3	3	2	0
Weather	0	38	36	60	58	55	28	22
Pedestrian corridor in use	0	3	2	2	3	4	2	1
Uninvolved vehicle	0	16	12	17	16	22	13	8
Uninvolved pedestrian	0	2	1	4	4	4	1	1
Presence of prior accident	0	2	2	3	4	5	3	2
No contributing factor(s) identified	21	919	1007	1473	1628	1473	954	857
Not applicable/Not stated	0	0	0	0	1	0	0	0
Total	87	4467	4667	6743	7579	6947	4340	3691

*NOTE: For each vehicle and/or driver involved in a collision, police can record up to three contributing factors. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

Table 9-7 Driver Involvement Rate (per 10,000 Licensed Drivers) in Collisions by Contributing Factors and Age

Table 9-7

Driver Involvement Rate (per 10,000 Licensed Drivers) in Collisions by Contributing Factors and Age Group: 2008

Contributing Factor	Age Group						
	16-19	20-24	25-34	35-44	45-54	55-64	65+
Any At-fault Driver Action	247.5	160.7	91.8	69.5	53.1	52.2	55.2
Follow too closely	23.8	19.5	12.7	9.6	7.6	6.3	5.1
Turning improperly	11.4	10.1	5.0	5.1	3.4	4.5	5.0
Exceeding speed limit	7.3	5.8	1.8	0.9	0.8	0.3	0.2
Driving too fast for conditions	51.5	34.8	17.1	12.6	8.8	7.1	4.8
Unsafe operating speed (Too fast or too slow)	10.7	5.3	2.5	2.2	1.1	1.0	0.5
Passing improperly	2.4	2.6	1.5	1.2	0.8	0.8	1.2
Changing lanes improperly	8.2	5.8	3.2	2.3	2.0	1.9	3.5
Fail to yield right of way	23.8	19.2	11.5	10.6	7.1	10.8	12.2
Disobey traffic control device/officer	8.8	9.3	5.6	4.1	3.8	3.3	4.9
Drive wrong way on roadway	0.2	0.8	0.3	0.1	<0.1	0.3	0.3
Passing a vehicle at pedestrian X-walk	0.2	0.2	-	-	-	-	<0.1
Back unsafely	10.9	7.1	5.3	3.6	4.4	5.0	5.1
Parking improperly	0.2	0.3	0.6	0.4	0.2	0.3	0.7
Careless Driving	23.4	15.1	8.4	5.9	4.7	3.8	3.1
Lost control/Drive off road	40.6	22.4	15.5	10.0	6.5	5.7	5.3
Driverless vehicle ran out of control	0.2	-	<0.1	<0.1	0.1	<0.1	-
Leave stop sign before safe to do so	7.5	3.9	4.0	2.2	2.2	1.8	4.3
Failed to signal	0.4	0.6	0.3	0.1	0.2	0.3	0.2
Take avoiding action	11.2	8.7	5.4	3.1	3.7	3.0	2.0
Driver inexperience	58.4	11.6	3.4	1.7	0.8	0.6	0.4
Pedestrian error/confusion	0.9	1.1	0.2	0.1	0.1	0.3	0.3
Any At-fault Human Condition	54.5	46.8	24.4	18.6	14.7	13.9	16.9
Loss of consciousness/Blackout prior to collision	0.4	1.0	0.6	0.5	0.4	0.6	0.7
Extreme fatigue/Fell asleep	3.4	3.5	2.1	0.8	1.1	0.8	0.8
Defective eyesight	0.2	0.3	<0.1	0.1	0.1	0.3	0.3
Defective hearing	-	-	-	-	-	<0.1	0.3
Medical disability	0.2	-	-	0.1	0.1	0.2	0.3
Physical disability	0.2	0.2	0.3	0.1	<0.1	0.2	0.5
Mental disability	-	-	0.2	-	<0.1	-	0.3
Mental confusion/Inability to remember	0.2	-	0.3	0.1	0.2	0.2	0.8
Sudden illness	0.4	0.3	-	0.2	0.2	0.3	0.2
Ability impaired alcohol	6.9	7.1	4.0	3.2	1.9	1.4	0.2
Ability impaired drugs	-	1.1	0.2	0.3	<0.1	-	-
Had been drinking/Suspected alcohol use	4.1	5.8	2.4	1.4	0.8	0.3	<0.1
Distraction/Inattention	39.1	29.8	14.9	12.5	10.2	10.1	12.9
Exceed hours of service (commercial drivers only)	-	-	-	<0.1	-	-	-
Any At-fault Vehicle Defect	5.8	5.8	3.6	2.5	2.6	1.7	1.0
Defective brakes	2.8	0.8	0.5	0.5	0.6	0.3	0.3
Defective steering	0.2	0.5	0.2	<0.1	<0.1	-	0.2
Defective headlights	-	0.3	-	<0.1	-	-	-
Defective brake lights	-	0.2	0.2	-	-	-	<0.1
Defective lighting (unspecified)	0.2	-	-	<0.1	<0.1	-	-
Defective engine controls/drive train	-	0.2	0.2	0.5	0.3	-	0.2
Defective suspension/wheels	-	0.3	<0.1	0.3	0.2	<0.1	-

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Section 9

Contributing Factors

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Contributing Factor	Age Group						
	16-19	20-24	25-34	35-44	45-54	55-64	65+
Defective tires	1.7	1.3	0.9	<0.1	0.3	0.3	0.2
Tow hitch/yoke defective	-	-	0.2	0.1	0.1	<0.1	-
Defective exhaust system	-	0.2	-	<0.1	-	-	-
Hood/tailgate/door/covering opened	-	0.2	0.2	0.1	0.3	<0.1	-
Defective glazing (obscured windows)	-	0.3	-	<0.1	<0.1	<0.1	-
Vehicle modifications	0.4	0.8	0.3	<0.1	0.2	0.2	-
Fire	-	-	-	-	-	-	-
Overloaded/oversized	-	-	<0.1	-	<0.1	-	-
Load shifted/spilled	0.2	0.2	0.3	0.2	0.3	0.3	0.2
Jack-knife/trailer swing	-	-	0.3	0.1	0.3	-	-
Hydroplaning tires	0.4	0.6	-	-	-	0.2	-
Any At-fault Environmental Condition	151.5	121.7	78.1	76.1	75.5	61.4	36.9
Animal action - Wild	50.6	50.2	36.3	41.0	44.5	36.4	19.1
Animal action - Domestic	4.9	3.7	1.4	2.0	1.6	1.6	1.0
Slippery road surface	68.0	47.8	29.0	22.7	19.8	14.7	10.4
Snow drift	4.9	4.7	2.4	2.5	1.9	1.4	0.6
Obstruction/debris on roadway	3.6	3.1	1.6	1.1	1.3	0.8	0.8
View obstructed/limited	5.8	4.3	2.4	3.0	3.0	1.7	2.0
Glare/reflection	1.9	0.8	0.9	0.8	1.0	1.1	0.7
Construction zone	0.4	0.5	0.4	0.4	0.5	0.2	0.4
Defective driving surface	6.4	2.7	2.0	1.2	1.1	1.1	0.4
Shoulders defective	-	0.8	<0.1	0.3	0.1	<0.1	0.3
Lane markings inadequate	0.2	-	<0.1	0.2	-	-	-
Defective/inoperative traffic control device	0.2	0.3	<0.1	0.3	<0.1	-	<0.1
Weather	8.2	6.3	5.0	3.0	2.3	3.0	1.8
Pedestrian corridor in use	0.4	0.5	0.4	0.1	-	-	0.2
Uninvolved vehicle	3.0	2.7	0.8	0.9	1.1	1.0	0.3
Uninvolved pedestrian	0.6	0.3	<0.1	0.3	0.2	-	-
Presence of prior accident	0.9	0.8	0.6	0.8	0.4	0.3	<0.1

Table 9-7a Driver Involvement Rate (per 10,000 Licensed Drivers) in Collisions by Contributing Factors and Age for Previous Five Years

Table 9-7a

Driver Involvement Rate (per 10,000 Licensed Drivers) in Collisions by Contributing Factors and Age Group: 2003-2007 Average

Contributing Factor	Age Group						
	16-19	20-24	25-34	35-44	45-54	55-64	65+
Any At-fault Driver Action	306.6	179.9	102.9	90.1	67.5	60.2	71.5
Following too closely	35.3	21.6	13.0	12.8	9.1	7.0	5.8
Turning improperly	17.3	10.1	6.4	5.8	5.3	4.9	7.6
Exceeding speed limit	9.7	6.1	1.9	1.1	0.5	0.4	0.1
Driving too fast for conditions	58.3	38.0	19.6	14.4	9.8	7.5	5.0
Unsafe operating speed (Too fast or too slow)	9.7	5.1	2.4	1.3	0.8	0.7	0.5
Passing improperly	4.3	2.6	1.6	1.1	1.0	1.0	1.0
Changing lanes improperly	9.6	6.2	3.0	2.8	2.4	2.3	4.0
Fail to yield right of way	35.9	24.1	14.5	14.1	11.5	11.5	16.5
Disobey traffic control device/officer	12.4	11.4	6.5	5.1	4.0	3.6	5.5
Drive wrong way on roadway	0.8	0.8	0.4	0.4	0.2	0.1	0.5
Passing a vehicle at pedestrian X-walk	0.3	0.2	<0.1	<0.1	<0.1	<0.1	<0.1
Back unsafely	23.6	13.4	9.9	11.2	8.8	8.9	10.8
Parking improperly	1.7	0.8	0.6	0.8	0.7	0.8	1.5
Careless Driving	19.7	12.7	7.0	5.6	3.7	3.0	3.3
Lost control/Drive off road	36.3	21.4	10.7	7.9	5.3	4.1	4.0
Driverless vehicle ran out of control	0.3	0.2	0.2	0.2	0.1	0.1	<0.1
Leave stop sign before safe to do so	9.4	5.7	3.5	3.6	2.7	2.8	5.7
Failed to signal	0.4	0.2	0.2	0.2	0.1	0.2	0.2
Take avoiding action	12.1	8.5	5.4	4.8	3.5	3.1	1.6
Driver inexperience	61.2	8.9	3.0	1.5	0.7	0.5	0.4
Pedestrian error/confusion	0.9	0.8	0.5	0.3	0.3	0.3	0.3
Any At-fault Human Condition	70.0	52.2	27.5	23.1	16.6	14.7	19.1
Loss of consciousness/Blackout prior to collision	0.9	1.0	0.3	0.6	0.6	0.5	0.7
Extreme fatigue/Fell asleep	5.8	4.2	1.5	1.1	0.7	0.7	0.7
Defective eyesight	0.4	0.2	0.1	0.1	0.1	0.1	0.6
Defective hearing	-	<0.1	<0.1	<0.1	<0.1	<0.1	0.3
Medical disability	0.1	0.2	0.1	0.2	0.1	0.2	0.6
Physical disability	0.5	<0.1	0.1	0.2	0.1	0.1	0.5
Mental disability	0.2	-	<0.1	0.1	<0.1	<0.1	0.1
Mental confusion/Inability to remember	0.3	0.4	0.1	0.2	0.2	0.2	1.6
Sudden illness	0.1	0.1	<0.1	0.1	0.1	0.3	0.2
Ability impaired alcohol	8.8	9.6	5.5	4.1	2.2	1.3	0.6
Ability impaired drugs	0.7	0.4	0.2	0.2	<0.1	0.1	<0.1
Had been drinking/Suspected alcohol use	5.6	6.3	2.5	1.7	1.0	0.6	0.3
Distraction/Inattention	48.6	31.6	17.8	15.3	11.9	11.0	13.6
Exceed hours of service (commercial drivers only)	<0.1	-	-	0.1	-	<0.1	-
Any At-fault Vehicle Defect	10.9	6.9	4.7	4.1	2.7	2.2	1.6
Defective brakes	2.2	1.5	0.9	0.8	0.5	0.3	0.3
Defective steering	0.7	0.5	0.2	0.2	0.2	0.2	0.1
Defective headlights	0.3	0.1	<0.1	<0.1	<0.1	<0.1	-
Defective brake lights	0.2	0.1	<0.1	<0.1	<0.1	<0.1	-
Defective lighting (unspecified)	0.3	0.2	0.1	<0.1	<0.1	<0.1	<0.1
Defective engine controls/drive train	0.9	0.5	0.5	0.3	0.2	0.2	0.3
Defective suspension/wheels	0.6	0.5	0.3	0.2	0.2	0.1	<0.1

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Contributing Factor	Age Group						
	16-19	20-24	25-34	35-44	45-54	55-64	65+
Defective tires	3.1	1.5	0.8	0.7	0.4	0.2	0.2
Tow hitch/yoke defective	<0.1	<0.1	0.2	0.2	<0.1	0.1	<0.1
Defective exhaust system	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-
Hood/tailgate/door/covering opened	0.2	0.2	<0.1	0.2	0.1	<0.1	0.1
Defective glazing (obscured windows)	0.4	0.3	<0.1	0.1	<0.1	<0.1	<0.1
Vehicle modifications	0.6	0.4	0.5	0.3	0.2	0.2	<0.1
Fire	0.5	0.4	0.3	0.3	0.2	0.2	0.2
Overloaded/oversized	<0.1	0.2	<0.1	0.2	0.1	<0.1	<0.1
Load shifted/spilled	0.2	0.2	0.2	0.4	0.2	0.2	0.1
Jack-knife/trailer swing	0.3	<0.1	0.3	0.2	0.2	0.3	<0.1
Hydroplaning tires	14.8	13.2	10.3	12.6	10.0	7.4	4.9
Any At-fault Environmental Condition	188.5	136.1	101.8	104.9	85.5	65.5	43.9
Animal action - Wild	56.2	47.6	38.8	45.8	40.9	31.7	17.9
Animal action - Domestic	3.7	2.9	2.4	2.1	1.4	1.1	0.9
Slippery road surface	77.8	53.1	35.6	31.7	22.5	16.9	12.1
Snow drift	5.7	3.5	2.7	2.1	1.4	1.1	0.8
Obstruction/debris on roadway	3.3	2.8	2.2	1.5	1.4	1.1	0.9
View obstructed/limited	10.3	5.8	4.9	5.0	4.1	3.3	3.3
Glare/reflection	2.2	1.6	1.2	1.0	0.7	0.7	1.0
Construction zone	0.9	0.8	0.3	0.5	0.4	0.4	0.3
Defective driving surface	9.7	3.9	2.7	1.9	1.7	0.9	0.7
Shoulders defective	0.9	0.3	0.4	0.4	0.2	0.2	0.1
Lane markings inadequate	0.2	<0.1	<0.1	<0.1	<0.1	0.1	-
Defective/inoperative traffic control device	0.7	0.5	0.2	0.2	0.2	0.2	<0.1
Weather	8.2	5.8	4.9	4.2	3.4	2.3	1.9
Pedestrian corridor in use	0.6	0.3	0.1	0.2	0.3	0.2	<0.1
Uninvolved vehicle	3.4	1.9	1.3	1.2	1.4	1.1	0.6
Uninvolved pedestrian	0.5	0.2	0.3	0.3	0.2	<0.1	0.1
Presence of prior accident	0.5	0.3	0.3	0.3	0.3	0.2	0.2

Younger drivers, especially those under the age of 25, tend to have higher driver involvement rates in traffic collisions overall and in collisions where specific contributing factors are noted.

In 2008, the involvement rate in collisions for drivers aged 16 to 19 with:

- Any at-fault "driver action" recorded is:
 - 1.5 times that of drivers aged 20 to 24;
 - 2.9 times that of drivers aged 25 to 34;
 - 3.6 times that of drivers aged 35 to 44; and,
 - 4.7 times that of drivers aged 45 and older.
- Any at-fault "human condition" recorded is:
 - 1.2 times that of drivers aged 20 to 24;
 - 2.2 times that of drivers aged 25 to 34;
 - 2.9 times that of drivers aged 35 to 44; and,
 - 3.6 times that of drivers aged 45 and older.
- "Driver inexperience" recorded is:
 - 5.0 times that of drivers aged 20 to 24;
 - 17.1 times that of drivers aged 25 to 34;
 - 35.0 times that of drivers aged 35 to 44; and,
 - 104.5 times that of drivers aged 45 and older.

In 2008, the involvement rate in collisions for drivers aged 20 to 24 with:

- Any at-fault "driver action" recorded is:
 - 1.8 times that of drivers aged 25 to 34;
 - 2.3 times that of drivers aged 35 to 44; and,
 - 3.0 times that of drivers aged 45 and older.
- Any at-fault "human condition" recorded is:
 - 1.9 times that of drivers aged 25 to 34;
 - 2.5 times that of drivers aged 35 to 44; and,
 - 3.1 times that of drivers aged 45 and older.
- "Driver inexperience" recorded is:
 - 3.4 times that of drivers aged 25 to 34;
 - 6.9 times that of drivers aged 35 to 44; and,
 - 20.7 times that of drivers aged 45 and older.

As with driver involvement rates in traffic collisions overall, many drivers in specific age groups experienced a decrease in their involvement in specific contributing factors when comparing 2008 to the previous five years (2003 to 2007) on average.

The involvement rate in collisions for drivers aged 16 to 19 in 2008 compared to the previous five years (2003 to 2007) on average where:

- Any at-fault "driver action" was a contributing factor – 247.5 in 2008, down 19% from the previous five years (306.6);
- "Speeding" was a contributing factor – 69.1 in 2008, down 8% from the previous five years (75.1);
- "Driver inexperience" was a contributing factor – 58.4 in 2008, down nearly 5% from the previous five years (61.2);
- "Lost control" was a contributing factor – 40.6 in 2008, up 12% from the previous five years (36.3);
- "Fail to yield right-of-way" was a contributing factor – 23.8 in 2008, down 34% from the previous five years (35.9);
- "Careless driving" was a contributing factor – 23.4 in 2008, up 19% from the previous five years (19.7);
- Any at-fault "human condition" was a contributing factor – 54.5 in 2008, down 22% from the previous five years (70.0);
- "Distraction/inattention" was a contributing factor – 39.1 in 2008, down 20% from the previous five years (48.6);
- "Impaired" was a contributing factor – 10.9 in 2008, down 24% from the previous five years (14.4);
- "Slippery road surface" was a contributing factor – 68.0 in 2008, down nearly 13% from the previous five years (77.8); and,
- "Animal action – wild" was a contributing factor – 50.6 in 2008, down 10% from the previous five years (56.2).

The involvement rate in collisions for drivers aged 20 to 24 in 2008 compared to the previous five years (2003 to 2007) on average where:

- Any at-fault "driver action" was a contributing factor – 160.7 in 2008, down 11% from the previous five years (179.9);
- "Speeding" was a contributing factor – 44.6 in 2008, down 7% from the previous five years (47.8);
- "Driver inexperience" was a contributing factor – 11.6 in 2008, up nearly 30% from the previous five years (8.9);
- "Lost control" was a contributing factor – 22.4 in 2008, up nearly 5% from the previous five years (21.4);
- "Fail to yield right-of-way" was a contributing factor – 19.2 in 2008, down 21% from the previous five years (24.1);
- "Careless driving" was a contributing factor – 15.1 in 2008, up 19% from the previous five years (12.7);
- Any at-fault "human condition" was a contributing factor – 46.8 in 2008, down 10% from the previous five years (52.2);
- "Distraction/inattention" was a contributing factor – 29.8 in 2008, down 6% from the previous five years (31.6);
- "Impaired" was a contributing factor – 12.9 in 2008, down 17% from the previous five years (15.5);

- "Slippery road surface" was a contributing factor – 47.8 in 2008, down 10% from the previous five years (53.1); and,
- "Animal action – wild" was a contributing factor – 50.2 in 2008, up nearly 6% from the previous five years (47.6).

The involvement rate in collisions for drivers aged 25 to 34 in 2008 compared to the previous five years (2003 to 2007) on average where:

- Any at-fault "driver action" was a contributing factor – 91.8 in 2008, down 11% from the previous five years (102.9);
- "Speeding" was a contributing factor – 21.3 in 2008, down nearly 10% from the previous five years (23.5);
- "Lost control" was a contributing factor – 15.5 in 2008, up 45% from the previous five years (26.3);
- "Fail to yield right-of-way" was a contributing factor – 11.5 in 2008, down 20% from the previous five years (14.5);
- "Careless driving" was a contributing factor – 8.4 in 2008, up 21% from the previous five years (7.0);
- Any at-fault "human condition" was a contributing factor – 24.4 in 2008, down 11% from the previous five years (27.5);
- "Distraction/inattention" was a contributing factor – 14.9 in 2008, down 16% from the previous five years (17.8);
- "Impaired" was a contributing factor – 6.2 in 2008, down 21% from the previous five years (7.9);
- "Slippery road surface" was a contributing factor – 29.0 in 2008, down 19% from the previous five years (35.6); and,
- "Animal action – wild" was a contributing factor – 36.3 in 2008, down nearly 7% from the previous five years (38.8).

The involvement rate in collisions for drivers aged 35 to 44 in 2008 compared to the previous five years (2003 to 2007) on average where:

- Any at-fault "driver action" was a contributing factor – 69.5 in 2008, down 23% from the previous five years (90.1);
- "Speeding" was a contributing factor – 15.6 in 2008, down 6% from the previous five years (16.6);
- "Lost control" was a contributing factor – 10.0 in 2008, up 26% from the previous five years (7.9);
- "Fail to yield right-of-way" was a contributing factor – 10.6 in 2008, down 25% from the previous five years (14.1);
- "Careless driving" was a contributing factor – 5.9 in 2008, up 5% from the previous five years (5.6);
- Any at-fault "human condition" was a contributing factor – 18.6 in 2008, down 20% from the previous five years (23.1);
- "Distraction/inattention" was a contributing factor – 12.5 in 2008, down 18% from the previous five years (15.3);
- "Impaired" was a contributing factor – 4.5 in 2008, down 21% from the previous five years (5.7);
- "Slippery road surface" was a contributing factor – 22.7 in 2008, down 29% from the previous five years (31.7); and,
- "Animal action – wild" was a contributing factor – 41.0 in 2008, down 10% from the previous five years (45.8).

The involvement rate in collisions for drivers aged 45 to 54 in 2008 compared to the previous five years (2003 to 2007) on average where:

- Any at-fault "driver action" was a contributing factor – 53.1 in 2008, down 21% from the previous five years (67.5);
- "Speeding" was a contributing factor – 10.6 in 2008, down nearly 5% from the previous five years (11.1);
- "Lost control" was a contributing factor – 6.5 in 2008, up 23% from the previous five years (5.3);
- "Fail to yield right-of-way" was a contributing factor – 7.1 in 2008, down 38% from the previous five years (11.5);
- "Careless driving" was a contributing factor – 4.7 in 2008, up 29% from the previous five years (3.7);
- Any at-fault "human condition" was a contributing factor – 14.7 in 2008, down nearly 12% from the previous five years (16.6);

- "Distraction/inattention" was a contributing factor – 10.2 in 2008, down 14% from the previous five years (11.9);
- "Impaired" was a contributing factor – 2.6 in 2008, down 17% from the previous five years (3.1);
- "Slippery road surface" was a contributing factor – 19.8 in 2008, down 12% from the previous five years (22.5); and,
- "Animal action – wild" was a contributing factor – 44.5 in 2008, up 9% from the previous five years (40.9).

The involvement rate in collisions for drivers aged 55 to 64 in 2008 compared to the previous five years (2003 to 2007) on average where:

- Any at-fault "driver action" was a contributing factor – 52.2 in 2008, down 13% from the previous five years (60.2);
- "Speeding" was a contributing factor – 8.3 in 2008, down 2% from the previous five years (8.5);
- "Lost control" was a contributing factor – 5.7 in 2008, up nearly 41% from the previous five years (4.1);
- "Fail to yield right-of-way" was a contributing factor – 10.8 in 2008, down 6% from the previous five years (11.5);
- "Careless driving" was a contributing factor – 3.8 in 2008, up 28% from the previous five years (3.0);
- Any at-fault "human condition" was a contributing factor – 13.9 in 2008, down 6% from the previous five years (14.7);
- "Distraction/inattention" was a contributing factor – 10.1 in 2008, down nearly 8% from the previous five years (11.0);
- "Impaired" was a contributing factor – 1.7 in 2008, down 7% from the previous five years (1.8);
- "Slippery road surface" was a contributing factor – 14.7 in 2008, down 13% from the previous five years (16.9); and,
- "Animal action – wild" was a contributing factor – 36.4 in 2008, up 15% from the previous five years (31.7).

The involvement rate in collisions for drivers aged 65 and older in 2008 compared to the previous five years (2003 to 2007) on average where:

- Any at-fault "driver action" was a contributing factor – 55.2 in 2008, down 23% from the previous five years (71.5);
- "Speeding" was a contributing factor – 5.4 in 2008, down nearly 4% from the previous five years (5.6);
- "Lost control" was a contributing factor – 5.3 in 2008, up 31% from the previous five years (4.0);
- "Fail to yield right-of-way" was a contributing factor – 12.2 in 2008, down 26% from the previous five years (16.5);
- "Careless driving" was a contributing factor – 3.1 in 2008, down 5% from the previous five years (3.3);
- Any at-fault "human condition" was a contributing factor – 16.9 in 2008, down nearly 12% from the previous five years (19.1);
- "Distraction/inattention" was a contributing factor – 12.9 in 2008, down 5% from the previous five years (13.6);
- "Impaired" was a contributing factor – 0.3 in 2008, down 72% from the previous five years (0.9);
- "Slippery road surface" was a contributing factor – 10.47 in 2008, down 14% from the previous five years (12.7); and,
- "Animal action – wild" was a contributing factor – 19.1 in 2008, up nearly 7% from the previous five years (17.9).

Section 9

Contributing Factors

Table 9-8 Collision Victims by Contributing Factors Recorded and Casualty Type

Table 9-8
Total Victims by Contributing Factors and Casualty Type: 2008

Contributing Factor	2008 Casualty Type												2008 Total Victims	% of 2008 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Driver Action - Driving Properly & Human Condition - Apparently Normal	9	9.8%	69	17.4%	1013	34.0%	1454	39.4%	290	36.5%	2826	35.9%	2835	35.6%
Driver Action - Driving properly	0	-	15	3.8%	134	4.5%	235	6.4%	39	4.9%	423	5.4%	423	5.3%
Any At-fault Driver Action	48	52.2%	182	45.8%	891	29.9%	559	15.1%	98	12.3%	1730	22.0%	1778	22.4%
Follow too closely	1	1.1%	1	0.3%	43	1.4%	47	1.3%	7	0.9%	98	1.2%	99	1.2%
Turning improperly	1	1.1%	3	0.8%	28	0.9%	26	0.7%	6	0.8%	63	0.8%	64	0.8%
Exceeding speed limit	8	8.7%	17	4.3%	31	1.0%	17	0.5%	6	0.8%	71	0.9%	79	1.0%
Driving too fast for conditions	5	5.4%	34	8.6%	209	7.0%	133	3.6%	14	1.8%	390	5.0%	395	5.0%
Unsafe operating speed (Too fast or too slow)	8	8.7%	21	5.3%	84	2.8%	27	0.7%	5	0.6%	137	1.7%	145	1.8%
Passing improperly	1	1.1%	2	0.5%	10	0.3%	2	<0.1%	0	-	14	0.2%	15	0.2%
Changing lanes improperly	1	1.1%	0	-	4	0.1%	10	0.3%	0	-	14	0.2%	15	0.2%
Fail to yield right of way	2	2.2%	16	4.0%	69	2.3%	62	1.7%	11	1.4%	158	2.0%	160	2.0%
Disobey traffic control device/officer	1	1.1%	10	2.5%	63	2.1%	29	0.8%	13	1.6%	115	1.5%	116	1.5%
Drive wrong way on roadway	2	2.2%	0	-	4	0.1%	1	<0.1%	3	0.4%	8	0.1%	10	0.1%
Back unsafely	0	-	0	-	2	<0.1%	5	0.1%	1	0.1%	8	0.1%	8	0.1%
Parking improperly	0	-	0	-	0	-	1	<0.1%	0	-	1	<0.1%	1	<0.1%
Careless Driving	11	12.0%	37	9.3%	123	4.1%	65	1.8%	12	1.5%	237	3.0%	248	3.1%
Lost control/Drive off road	19	20.7%	87	21.9%	322	10.8%	142	3.8%	19	2.4%	570	7.3%	589	7.4%
Driverless vehicle ran out of control	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Leave stop sign before safe to do so	0	-	4	1.0%	35	1.2%	25	0.7%	4	0.5%	68	0.9%	68	0.9%
Failed to signal	0	-	0	-	0	-	1	<0.1%	1	0.1%	2	<0.1%	2	<0.1%
Take avoiding action	0	-	15	3.8%	57	1.9%	41	1.1%	0	-	113	1.4%	113	1.4%
Driver inexperience	1	1.1%	18	4.5%	107	3.6%	42	1.1%	8	1.0%	175	2.2%	176	2.2%
Pedestrian error/confusion	3	3.3%	9	2.3%	27	0.9%	21	0.6%	9	1.1%	66	0.8%	69	0.9%

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Contributing Factor	2008 Casualty Type												2008 Total Victims	% of 2008 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Human Condition - Apparently Normal	5	5.4%	46	11.6%	487	16.3%	501	13.6%	126	15.9%	1160	14.8%	1165	14.6%
Any At-fault Human Condition	41	44.6%	77	19.4%	274	9.2%	149	4.0%	24	3.0%	524	6.7%	565	7.1%
Loss of consciousness/Blackout prior to collision	2	2.2%	7	1.8%	17	0.6%	5	0.1%	2	0.3%	31	0.4%	33	0.4%
Extreme fatigue/Fell asleep	2	2.2%	15	3.8%	35	1.2%	15	0.4%	0	-	65	0.8%	67	0.8%
Defective eyesight	0	-	0	-	3	0.1%	1	<0.1%	0	-	4	<0.1%	4	<0.1%
Defective hearing	1	1.1%	0	-	1	<0.1%	2	<0.1%	0	-	3	<0.1%	4	<0.1%
Medical disability	0	-	3	0.8%	2	<0.1%	2	<0.1%	0	-	7	<0.1%	7	<0.1%
Physical disability	0	-	0	-	1	<0.1%	4	0.1%	0	-	5	<0.1%	5	<0.1%
Mental disability	1	1.1%	0	-	7	0.2%	2	<0.1%	0	-	9	0.1%	10	0.1%
Mental confusion/Inability to remember	0	-	0	-	4	0.1%	4	0.1%	0	-	8	0.1%	8	0.1%
Sudden illness	2	2.2%	1	0.3%	2	<0.1%	3	<0.1%	1	0.1%	7	<0.1%	9	0.1%
Ability impaired alcohol	16	17.4%	20	5.0%	47	1.6%	21	0.6%	5	0.6%	93	1.2%	109	1.4%
Ability impaired drugs	3	3.3%	1	0.3%	9	0.3%	1	<0.1%	1	0.1%	12	0.2%	15	0.2%
Had been drinking/Suspected alcohol use	18	19.6%	19	4.8%	39	1.3%	13	0.4%	2	0.3%	73	0.9%	91	1.1%
Distraction/Inattention	4	4.3%	18	4.5%	135	4.5%	83	2.2%	13	1.6%	249	3.2%	253	3.2%
Exceed hours of service (commercial drivers only)	0	-	0	-	0	-	0	-	0	-	0	-	0	-
No apparent (vehicle) defect	28	30.4%	119	30.0%	1402	47.1%	1852	50.2%	385	48.5%	3758	47.8%	3786	47.6%
Any At-fault Vehicle Defect	6	6.5%	8	2.0%	19	0.6%	18	0.5%	1	0.1%	46	0.6%	52	0.7%
Defective brakes	1	1.1%	1	0.3%	5	0.2%	6	0.2%	0	-	12	0.2%	13	0.2%
Defective steering	0	-	1	0.3%	2	<0.1%	1	<0.1%	0	-	4	<0.1%	4	<0.1%
Defective headlights	2	2.2%	2	0.5%	0	-	0	-	0	-	2	<0.1%	4	<0.1%
Defective brake lights	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Defective lighting (unspecified)	0	-	0	-	0	-	1	<0.1%	0	-	1	<0.1%	1	<0.1%
Defective engine controls/drive train	0	-	1	0.3%	2	<0.1%	1	<0.1%	0	-	4	<0.1%	4	<0.1%
Defective suspension/wheels	0	-	0	-	2	<0.1%	1	<0.1%	0	-	3	<0.1%	3	<0.1%
Defective tires	1	1.1%	1	0.3%	2	<0.1%	3	<0.1%	0	-	6	<0.1%	7	<0.1%
Tow hitch/yoke defective	0	-	0	-	1	<0.1%	1	<0.1%	0	-	2	<0.1%	2	<0.1%
Defective exhaust system	2	2.2%	2	0.5%	0	-	0	-	0	-	2	<0.1%	4	<0.1%
Hood/tailgate/door/covering opened	0	-	0	-	0	-	4	0.1%	0	-	4	<0.1%	4	<0.1%
Defective glazing (obscured windows)	0	-	0	-	0	-	0	-	0	-	0	-	0	-

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Contributing Factor	2008 Casualty Type												2008 Total Victims	% of 2008 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Vehicle modifications	0	-	0	-	1	<0.1%	0	-	0	-	1	<0.1%	1	<0.1%
Fire	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Overloaded/oversized	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Load shifted/spilled	0	-	0	-	3	0.1%	0	-	0	-	3	<0.1%	3	<0.1%
Jack-knife/trailer swing	0	-	0	-	0	-	1	<0.1%	0	-	1	<0.1%	1	<0.1%
Hydroplaning tires	0	-	0	-	1	<0.1%	0	-	1	0.1%	2	<0.1%	2	<0.1%
Any At-fault Environmental Condition	7	7.6%	65	16.4%	365	12.3%	317	8.6%	46	5.8%	793	10.1%	800	10.1%
Animal action - Wild	0	-	20	5.0%	86	2.9%	122	3.3%	7	0.9%	235	3.0%	235	3.0%
Animal action - Domestic	0	-	0	-	15	0.5%	11	0.3%	3	0.4%	29	0.4%	29	0.4%
Slippery road surface	3	3.3%	23	5.8%	168	5.6%	117	3.2%	20	2.5%	328	4.2%	331	4.2%
Snow drift	0	-	4	1.0%	13	0.4%	14	0.4%	2	0.3%	33	0.4%	33	0.4%
Obstruction/debris on roadway	0	-	1	0.3%	13	0.4%	5	0.1%	3	0.4%	22	0.3%	22	0.3%
View obstructed/limited	2	2.2%	4	1.0%	16	0.5%	16	0.4%	2	0.3%	38	0.5%	40	0.5%
Glare/reflection	2	2.2%	1	0.3%	4	0.1%	1	<0.1%	3	0.4%	9	0.1%	11	0.1%
Construction zone	0	-	1	0.3%	2	<0.1%	2	<0.1%	1	0.1%	6	<0.1%	6	<0.1%
Defective driving surface	0	-	6	1.5%	22	0.7%	11	0.3%	3	0.4%	42	0.5%	42	0.5%
Shoulders defective	0	-	0	-	3	0.1%	0	-	0	-	3	<0.1%	3	<0.1%
Lane markings inadequate	0	-	0	-	0	-	2	<0.1%	0	-	2	<0.1%	2	<0.1%
Defective/inoperative traffic control device	0	-	0	-	1	<0.1%	1	<0.1%	0	-	2	<0.1%	2	<0.1%
Weather	1	1.1%	5	1.3%	27	0.9%	21	0.6%	7	0.9%	60	0.8%	61	0.8%
Pedestrian corridor in use	0	-	1	0.3%	6	0.2%	2	<0.1%	3	0.4%	12	0.2%	12	0.2%
Uninvolved vehicle	0	-	1	0.3%	8	0.3%	10	0.3%	1	0.1%	20	0.3%	20	0.3%
Uninvolved pedestrian	0	-	0	-	0	-	4	0.1%	0	-	4	<0.1%	4	<0.1%
Presence of prior accident	0	-	0	-	2	<0.1%	3	<0.1%	0	-	5	<0.1%	5	<0.1%
No contributing factor(s) identified	20	21.7%	78	19.6%	548	18.4%	992	26.9%	269	33.9%	1,887	24.0%	1,907	24.0%
Not applicable/Not stated	0	-	0	-	4	0.1%	0	-	0	-	4	<0.1%	4	<0.1%
Total	92	100%	397	100%	2979	100%	3691	100%	794	100%	7,861	100%	7,953	100%

*NOTE: For each vehicle and/or driver involved in a collision, police can record up to three contributing factors. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

Table 9-8a Victims by Contributing Factors and Casualty Type for Previous Five Years

Table 9-8a
Victims by Contributing Factors and Casualty Type: 2003 to 2007

Contributing Factor	2003-2007 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Driver Action - Driving Properly & Human Condition - Apparently Normal	11	86	1,293	1,975	334	3,688	3,699	40.7%
Driver Action - Driving properly	2	23	176	192	32	423	425	4.7%
Any At-fault Driver Action	55	149	836	504	104	1,594	1,649	18.1%
Follow too closely	1	4	47	50	9	110	111	1.2%
Turning improperly	1	5	51	30	8	94	96	1.1%
Exceeding speed limit	10	18	40	14	3	74	85	0.9%
Driving too fast for conditions	11	29	151	103	16	300	311	3.4%
Unsafe operating speed (Too fast or too slow)	6	9	37	15	5	65	71	0.8%
Passing improperly	2	2	13	7	1	23	25	0.3%
Changing lanes improperly	0	2	11	10	2	25	26	0.3%
Fail to yield right of way	4	18	120	90	21	248	252	2.8%
Disobey traffic control device/officer	4	10	79	42	13	143	147	1.6%
Drive wrong way on roadway	3	4	10	4	2	20	23	0.3%
Back unsafely	0	0	4	6	1	10	10	0.1%
Parking improperly	1	1	2	2	0	5	6	<0.1%
Careless Driving	5	19	67	38	11	135	140	1.5%
Lost control/Drive off road	18	44	199	87	15	344	362	4.0%
Driverless vehicle ran out of control	0	0	1	1	1	3	3	<0.1%
Leave stop sign before safe to do so	1	7	39	23	6	75	76	0.8%
Failed to signal	0	0	2	0	0	2	2	<0.1%
Take avoiding action	1	9	49	38	3	99	100	1.1%
Driver inexperience	5	19	103	35	6	163	169	1.9%
Pedestrian error/confusion	2	12	45	16	10	84	86	0.9%
Human Condition - Apparently Normal	13	76	607	503	102	1,289	1,302	14.3%
Any At-fault Human Condition	35	90	301	139	34	564	599	6.6%
Loss of consciousness/Blackout prior to collision	1	8	15	7	3	33	34	0.4%
Extreme fatigue/Fell asleep	3	11	36	13	2	62	65	0.7%
Defective eyesight	1	0	2	1	0	4	5	<0.1%
Defective hearing	0	1	0	0	0	1	2	<0.1%
Medical disability	1	2	4	1	1	8	9	0.1%
Physical disability	0	1	2	1	0	5	5	<0.1%
Mental disability	0	1	3	0	0	4	5	<0.1%
Mental confusion/Inability to remember	0	2	5	3	1	11	11	0.1%
Sudden illness	0	2	3	1	0	7	7	<0.1%
Ability impaired alcohol	14	32	66	30	8	135	149	1.6%
Ability impaired drugs	2	4	3	1	0	9	11	0.1%
Had been drinking/Suspected alcohol use	12	20	47	17	6	90	103	1.1%
Distraction/Inattention	7	29	178	89	20	315	322	3.5%
Exceed hours of service (commercial drivers only)	0	0	1	0	0	1	1	<0.1%

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Section 9

Contributing Factors

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Contributing Factor	2003-2007 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
No apparent (vehicle) defect	38	181	1,820	2,323	414	4,738	4,777	52.6%
Any At-fault Vehicle Defect	1	7	36	19	4	67	68	0.7%
Defective brakes	0	1	9	4	1	15	16	0.2%
Defective steering	0	0	2	2	0	4	4	<0.1%
Defective headlights	0	0	1	0	0	2	2	<0.1%
Defective brake lights	0	0	1	0	0	1	1	<0.1%
Defective lighting (unspecified)	0	1	1	0	1	3	3	<0.1%
Defective engine controls/drive train	0	1	1	2	1	4	4	<0.1%
Defective suspension/wheels	0	0	3	3	0	7	7	<0.1%
Defective tires	1	4	17	5	1	26	27	0.3%
Tow hitch/yoke defective	0	0	1	1	0	2	2	<0.1%
Defective exhaust system	0	1	0	0	1	1	1	<0.1%
Hood/tailgate/door/covering opened	0	0	0	2	0	2	2	<0.1%
Defective glazing (obscured windows)	0	0	1	1	0	2	2	<0.1%
Vehicle modifications	0	0	1	1	0	1	2	<0.1%
Fire	0	0	0	0	0	1	1	<0.1%
Overloaded/oversized	0	0	1	0	0	2	2	<0.1%
Load shifted/spilled	0	0	2	1	0	3	3	<0.1%
Jack-knife/trailer swing	0	0	2	1	0	3	3	<0.1%
Hydroplaning tires	0	0	1	1	0	2	2	<0.1%
Any At-fault Environmental Condition	17	77	537	421	43	1,077	1,094	12.0%
Animal action - Wild	1	15	108	132	11	267	268	2.9%
Animal action - Domestic	1	3	14	10	1	28	29	0.3%
Slippery road surface	11	35	288	192	23	537	548	6.0%
Snow drift	0	2	17	15	1	35	35	0.4%
Obstruction/debris on roadway	0	2	12	8	1	22	22	0.2%
View obstructed/limited	1	8	35	24	3	70	71	0.8%
Glare/reflection	0	2	12	5	1	19	20	0.2%
Construction zone	0	1	6	4	0	11	11	0.1%
Defective driving surface	1	12	41	20	2	75	76	0.8%
Shoulders defective	0	1	4	4	0	9	9	<0.1%
Lane markings inadequate	0	0	1	2	0	3	3	<0.1%
Defective/inoperative traffic control device	0	1	3	3	0	8	8	<0.1%
Weather	3	12	58	29	4	103	106	1.2%
Pedestrian corridor in use	0	1	7	4	1	13	13	0.1%
Uninvolved vehicle	0	0	8	14	1	24	24	0.3%
Uninvolved pedestrian	0	0	3	2	0	6	6	<0.1%
Presence of prior accident	0	0	3	4	0	7	7	<0.1%
No contributing factor(s) identified	22	91	620	1,036	251	1,998	2,019	22.2%
Not applicable/Not stated	0	1	0	0	0	1	1	<0.1%
Total	108	463	3,520	4,186	808	8,977	9,085	100%

*NOTE: For each vehicle and/or driver involved in a collision, police can record up to three contributing factors. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

In 2008, at-fault contributing factors were recorded for 32% of the drivers of vehicles involved in collisions resulting in casualties. At-fault contributing factors were recorded for:

- 65% of victims killed;
- 59% of victims seriously injured;
- 42% of minor injury victims; and,
- 23% of minimal injury victims.

In 2008, at-fault driver actions were recorded for 22% of all victims (52% of victims killed and 46% of victims who sustained a serious injury) while at-fault human conditions were recorded for 7% of all victims (45% of victims killed and 19% of victims who sustained a serious injury).

- In 2007, at-fault driver actions were recorded for 46% of all victims killed and 31% of victims seriously injured – at-fault human conditions were recorded for 34% of all victims killed and 21% of victims seriously injured.
- In the previous five year period (2003 to 2007) on average, at-fault driver actions were recorded for 51% of all victims killed and 32% of victims seriously injured – at-fault human conditions were recorded for 33% of all victims killed and 20% of victims seriously injured.

In 2008, the most prevalent at-fault contributing factors recorded for drivers of vehicles in which victims are killed include:

- "Lost control/Drive off the road" – 21% of victims killed (13% in 2007 - 16% in previous five years on average);
- "Had been drinking" – 20% of victims killed (13% in 2007 - 11% in previous five years on average);
- "Ability impaired by alcohol" – 17% of victims killed (16% in 2007 - 13% in previous five years on average);
- "Careless driving" – 12% of victims killed (6% in 2007 - 5% in previous five years on average);
- "Exceeding speed limit" – 9% of victims killed (7% in 2007 - 10% in previous five years on average); and,
- "Unsafe operating speed" – 9% of victims killed (5% in 2007 - 6% in previous five years on average).

In 2008, the most prevalent at-fault contributing factors recorded for drivers of vehicles in which victims sustained a serious injury include:

- "Lost control/Drive off road" - 22% of victims seriously injured killed (7% in 2007 - 10% in previous five years on average);
- "Careless Driving" - 9% of victims seriously injured killed (3% in 2007 - 4% in previous five years on average); and,
- "Driving too fast for conditions" - 9% of victims seriously injured killed (6% in 2007 - 6% in previous five years on average).

Table 9-9 Historical Summary of Contributing Factors Recorded for Total Collisions

Table 9-9
 Historical Summary of Contributing Factors Recorded for Total Collisions: 2003 to 2008

Contributing Factor	2003 Total Drivers	% of 2003 Total Drivers	2004 Total Drivers	% of 2004 Total Drivers	2005 Total Drivers	% of 2005 Total Drivers	2006 Total Drivers	% of 2006 Total Drivers	2007 Total Drivers	% of 2007 Total Drivers	2008 Total Drivers	% of 2008 Total Drivers
Driver Action - Driving Properly and Human Condition - Apparently Normal	17,073	32.5%	16,101	30.9%	14,538	29.7%	13,987	30.1%	14,129	31.5%	12,072	28.6%
Driver Action - Driving properly	1,663	3.2%	1,991	3.8%	2,262	4.6%	1,989	4.3%	1,926	4.3%	2,130	5.0%
Any At-fault Driver Action	9,057	17.3%	9,116	17.5%	9,293	19.0%	8,333	17.9%	8,520	19.0%	7,398	17.5%
Following too closely	1,150	2.2%	1,121	2.2%	1,201	2.5%	1,045	2.3%	1,173	2.6%	1,003	2.4%
Turning improperly	660	1.3%	662	1.3%	622	1.3%	626	1.3%	585	1.3%	506	1.2%
Exceeding speed limit	168	0.3%	145	0.3%	156	0.3%	165	0.4%	137	0.3%	138	0.3%
Driving too fast for conditions	1,378	2.6%	1,537	2.9%	1,442	2.9%	1,105	2.4%	1,391	3.1%	1,226	2.9%
Unsafe operating speed (Too fast or too slow)	184	0.4%	180	0.3%	178	0.4%	164	0.4%	165	0.4%	196	0.5%
Passing improperly	114	0.2%	151	0.3%	146	0.3%	126	0.3%	124	0.3%	118	0.3%
Changing lanes improperly	360	0.7%	382	0.7%	336	0.7%	315	0.7%	349	0.8%	310	0.7%
Fail to yield right of way	1,476	2.8%	1,425	2.7%	1,397	2.9%	1,245	2.7%	1,416	3.2%	1,096	2.6%
Disobey traffic control device/officer	599	1.1%	516	1.0%	575	1.2%	518	1.1%	589	1.3%	502	1.2%
Drive wrong way on roadway	36	<0.1%	46	<0.1%	32	<0.1%	36	<0.1%	38	<0.1%	23	<0.1%
Passing a vehicle at pedestrian X-walk	13	<0.1%	4	<0.1%	5	<0.1%	6	<0.1%	2	<0.1%	3	<0.1%
Back unsafely	942	1.8%	1,073	2.1%	1,138	2.3%	995	2.1%	753	1.7%	465	1.1%
Parking improperly	83	0.2%	84	0.2%	93	0.2%	91	0.2%	48	0.1%	33	<0.1%
Careless Driving	717	1.4%	581	1.1%	602	1.2%	638	1.4%	557	1.2%	653	1.5%
Lost control/Drive off road	741	1.4%	768	1.5%	811	1.7%	684	1.5%	744	1.7%	917	2.2%
Driverless vehicle ran out of control	10	<0.1%	23	<0.1%	16	<0.1%	9	<0.1%	10	<0.1%	6	<0.1%
Leave stop sign before safe to do so	383	0.7%	357	0.7%	341	0.7%	319	0.7%	322	0.7%	267	0.6%
Failed to signal	18	<0.1%	17	<0.1%	13	<0.1%	12	<0.1%	16	<0.1%	24	<0.1%
Take avoiding action	290	0.6%	333	0.6%	426	0.9%	366	0.8%	371	0.8%	337	0.8%
Driver inexperience	448	0.9%	420	0.8%	491	1.0%	529	1.1%	428	1.0%	468	1.1%
Pedestrian error/confusion	35	<0.1%	29	<0.1%	25	<0.1%	43	<0.1%	29	<0.1%	26	<0.1%

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Section 9

Contributing Factors

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Contributing Factor	2003 Total Drivers	% of 2003 Total Drivers	2004 Total Drivers	% of 2004 Total Drivers	2005 Total Drivers	% of 2005 Total Drivers	2006 Total Drivers	% of 2006 Total Drivers	2007 Total Drivers	% of 2007 Total Drivers	2008 Total Drivers	% of 2008 Total Drivers
Human Condition - Apparently Normal	7,572	14.4%	7,464	14.3%	7,039	14.4%	7,100	15.3%	7,689	17.1%	7,090	16.8%
Any At-fault Human Condition	2,326	4.4%	2,045	3.9%	2,151	4.4%	2,113	4.5%	1,984	4.4%	1,875	4.4%
Loss of consciousness/Blackout prior to collision	52	<0.1%	42	<0.1%	46	<0.1%	52	0.1%	35	<0.1%	46	0.1%
Extreme fatigue/Fell asleep	132	0.3%	109	0.2%	115	0.2%	127	0.3%	107	0.2%	113	0.3%
Defective eyesight	24	<0.1%	21	<0.1%	10	<0.1%	17	<0.1%	20	<0.1%	15	<0.1%
Defective hearing	5	<0.1%	8	<0.1%	6	<0.1%	3	<0.1%	4	<0.1%	4	<0.1%
Medical disability	15	<0.1%	17	<0.1%	11	<0.1%	28	<0.1%	24	<0.1%	12	<0.1%
Physical disability	16	<0.1%	17	<0.1%	18	<0.1%	20	<0.1%	15	<0.1%	18	<0.1%
Mental disability	4	<0.1%	7	<0.1%	8	<0.1%	7	<0.1%	6	<0.1%	7	<0.1%
Mental confusion/Inability to remember	51	<0.1%	27	<0.1%	26	<0.1%	20	<0.1%	36	<0.1%	23	<0.1%
Sudden illness	11	<0.1%	12	<0.1%	14	<0.1%	13	<0.1%	12	<0.1%	15	<0.1%
Ability impaired alcohol	355	0.7%	282	0.5%	297	0.6%	297	0.6%	260	0.6%	237	0.6%
Ability impaired drugs	22	<0.1%	13	<0.1%	11	<0.1%	18	<0.1%	12	<0.1%	18	<0.1%
Had been drinking/Suspected alcohol use	166	0.3%	181	0.3%	156	0.3%	150	0.3%	140	0.3%	136	0.3%
Distraction/Inattention	1,539	2.9%	1,378	2.6%	1,506	3.1%	1,444	3.1%	1,380	3.1%	1,289	3.1%
Exceed hours of service (commercial drivers only)	3	<0.1%	1	<0.1%	4	<0.1%	1	<0.1%	1	<0.1%	1	<0.1%
No apparent (vehicle) defect	23,098	44.0%	21,441	41.1%	19,862	40.6%	19,116	41.2%	19,649	43.8%	16,947	40.1%
Any At-fault Vehicle Defect	379	0.7%	371	0.7%	281	0.6%	282	0.6%	238	0.5%	231	0.5%
Defective brakes	64	0.1%	63	0.1%	69	0.1%	67	0.1%	43	<0.1%	50	0.1%
Defective steering	22	<0.1%	16	<0.1%	15	<0.1%	16	<0.1%	16	<0.1%	11	<0.1%
Defective headlights	3	<0.1%	9	<0.1%	5	<0.1%	5	<0.1%	6	<0.1%	3	<0.1%
Defective brake lights	2	<0.1%	14	<0.1%	4	<0.1%	3	<0.1%	2	<0.1%	8	<0.1%
Defective lighting (unspecified)	8	<0.1%	8	<0.1%	6	<0.1%	10	<0.1%	5	<0.1%	3	<0.1%
Defective engine controls/drive train	35	<0.1%	27	<0.1%	25	<0.1%	19	<0.1%	25	<0.1%	18	<0.1%
Defective suspension/wheels	14	<0.1%	30	<0.1%	14	<0.1%	18	<0.1%	12	<0.1%	11	<0.1%
Defective tires	68	0.1%	61	0.1%	42	<0.1%	65	0.1%	44	<0.1%	41	<0.1%
Tow hitch/yoke defective	11	<0.1%	12	<0.1%	11	<0.1%	5	<0.1%	12	<0.1%	9	<0.1%
Defective exhaust system	5	<0.1%	3	<0.1%	0	-	3	<0.1%	2	<0.1%	3	<0.1%
Hood/tailgate/door/covering opened	6	<0.1%	12	<0.1%	8	<0.1%	7	<0.1%	12	<0.1%	11	<0.1%
Defective glazing (obscured windows)	7	<0.1%	12	<0.1%	12	<0.1%	10	<0.1%	1	<0.1%	6	<0.1%
Vehicle modifications	7	<0.1%	45	<0.1%	22	<0.1%	14	<0.1%	20	<0.1%	17	<0.1%
Fire	77	0.1%	24	<0.1%	0	-	1	<0.1%	0	-	0	-

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Contributing Factors

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Contributing Factor	2003 Total Drivers	% of 2003 Total Drivers	2004 Total Drivers	% of 2004 Total Drivers	2005 Total Drivers	% of 2005 Total Drivers	2006 Total Drivers	% of 2006 Total Drivers	2007 Total Drivers	% of 2007 Total Drivers	2008 Total Drivers	% of 2008 Total Drivers
Overloaded/oversized	10	<0.1%	2	<0.1%	3	<0.1%	6	<0.1%	6	<0.1%	2	<0.1%
Load shifted/spilled	22	<0.1%	19	<0.1%	20	<0.1%	16	<0.1%	17	<0.1%	22	<0.1%
Jack-knife/trailer swing	16	<0.1%	10	<0.1%	26	<0.1%	16	<0.1%	12	<0.1%	11	<0.1%
Hydroplaning tires	12	<0.1%	8	<0.1%	5	<0.1%	5	<0.1%	6	<0.1%	8	<0.1%
Any At-fault Environmental Condition	7,575	14.4%	8,127	15.6%	7,245	14.8%	6,684	14.4%	6,306	14.1%	5,963	14.1%
Animal action - Wild	4,040	7.7%	3,948	7.6%	3,519	7.2%	3,497	7.5%	3,124	7.0%	2,926	6.9%
Animal action - Domestic	167	0.3%	171	0.3%	193	0.4%	171	0.4%	156	0.3%	148	0.4%
Slippery road surface	2,316	4.4%	2,887	5.5%	2,463	5.0%	2,052	4.4%	1,999	4.5%	1,976	4.7%
Snow drift	99	0.2%	234	0.4%	170	0.3%	127	0.3%	151	0.3%	171	0.4%
Obstruction/debris on roadway	114	0.2%	135	0.3%	140	0.3%	118	0.3%	144	0.3%	116	0.3%
View obstructed/limited	369	0.7%	407	0.8%	396	0.8%	350	0.8%	326	0.7%	231	0.5%
Glare/reflection	102	0.2%	91	0.2%	82	0.2%	69	0.1%	67	0.1%	77	0.2%
Construction zone	41	<0.1%	23	<0.1%	23	<0.1%	46	<0.1%	45	0.1%	32	<0.1%
Defective driving surface	178	0.3%	182	0.3%	205	0.4%	169	0.4%	153	0.3%	124	0.3%
Shoulders defective	24	<0.1%	17	<0.1%	36	<0.1%	21	<0.1%	21	<0.1%	17	<0.1%
Lane markings inadequate	6	<0.1%	11	<0.1%	2	<0.1%	3	<0.1%	5	<0.1%	5	<0.1%
Defective/inoperative traffic control device	21	<0.1%	8	<0.1%	20	<0.1%	14	<0.1%	21	<0.1%	11	<0.1%
Weather	298	0.6%	355	0.7%	334	0.7%	266	0.6%	258	0.6%	280	0.7%
Pedestrian corridor in use	18	<0.1%	13	<0.1%	13	<0.1%	14	<0.1%	25	<0.1%	16	<0.1%
Uninvolved vehicle	98	0.2%	102	0.2%	118	0.2%	103	0.2%	104	0.2%	96	0.2%
Uninvolved pedestrian	8	<0.1%	20	<0.1%	21	<0.1%	28	<0.1%	18	<0.1%	14	<0.1%
Presence of prior accident	21	<0.1%	26	<0.1%	20	<0.1%	22	<0.1%	23	<0.1%	39	<0.1%
No contributing factor(s) identified	18,424	35.1%	18,510	35.5%	16,877	34.5%	15,813	34.0%	13,884	30.9%	13,926	33.0%
Not applicable/Not stated	2	<0.1%	4	<0.1%	0	-	0	-	1	<0.1%	1	<0.1%
Total	52,496	100%	52,126	100%	48,970	100%	46,444	100%	44,878	100%	42,247	100%

*NOTE: For each vehicle and/or driver involved in a collision, police can record up to three contributing factors. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

SECTION 10 - National Safety Code Monitoring Report



Introduction

This section calculates the number of National Safety Code (NSC) commercial vehicles involved in traffic collisions, the severity of those collisions and the victims injured and killed in them.

Key Highlights

In 2008, there were 3,930 commercial vehicles involved in traffic collisions. Of these:

- 21 were involved in fatal collisions;
- 900 were involved in injury collisions; and,
- 3,009 were involved in PDO collisions.

Traffic collisions where at least one commercial vehicle was involved resulted in a total of 1,147 victims in 2008, including:

- 19 victims killed;
- 52 victims seriously injured;
- 1,076 victims where an injury was minor, minimal or unspecified.

Major Elements Examined

Counts of vehicles involved collisions in Manitoba for 2008 and previous years are taken from Traffic Accident Reports (TAR) completed by law enforcement agencies and compiled by Manitoba Public Insurance. These counts are presented for all reportable collisions, for fatal collisions, for injury collisions and for property damage only (PDO) collisions.

It is important to note that the number of collisions is not equal to the number of vehicles involved in those collisions, nor does it equal the number of victims in those collisions. All collisions reported involve at least one vehicle, but may involve more than one as well. Likewise, a single collision could involve no victims, or one or more victims.

The reader is cautioned that not all percentages and calculations in the following tables will add to 100% of the total noted. Rounding error will often produce a difference of one or two percentage points. Likewise, average calculations are presented for historical data from the years 2003 to 2007. Rounding error in these calculations will cause individual average counts not to add to total average counts in some cases.

The reader is cautioned when interpreting results regarding fatal collisions. Due to the small number of these types of collisions, fluctuations year-over-year could be dramatic; a small change in the total count of these types of collisions could have a significant effect on statistics such as percentage change to previous years.

The reader is cautioned that not all victims in a collision involving an NSC commercial vehicle will be a driver or passenger in the commercial vehicle. This section calculates the number of total victims resulting from a collision where a commercial vehicle was involved, not just the victims in the commercial vehicle.

Terms and Definitions

"Collision severity"

- A classification of a collision based on the most severe result of the collision, i.e., whether someone was killed (fatal), injured (injury) or property damage only (PDO) occurred.

"Fatal Collision"

- A motor vehicle collision in which at least one person is killed as a result of the collision. The death must have occurred within thirty days of the collision occurrence.

"Injury Collision"

- A motor vehicle collision in which at least one person has been recorded as sustaining some level of personal injury, but in which no one is fatally injured or killed. Levels of injury include: 'major' (admitted to hospital); 'minor' (treated and released from hospital); and, 'minimal' (no hospital treatment required).

"Property Damage Only (PDO) Collision"

- A motor vehicle collision in which no injury or fatality is sustained and only property damage is the result.

"Light Duty Vehicles"

- A classification of vehicle types including those defined in the Traffic Accident Report (TAR) as: passenger vehicles (automobile), mini/multi-purpose van, van under 4500 kg and pick-up under 4500 kg.

"NSC Commercial Vehicles"

- The National Safety Code (NSC) classification of vehicles is a classification of vehicle types including those defined in the Traffic Accident Report (TAR) as: "Truck greater than 4500 kilograms (unit chassis)", "Power Unit for Semi-Trailer", "Truck (Other)" (where the type and size of truck is unknown), "School Bus", "Transit Bus (Urban)", "Inter-City Bus", and "Bus (Other)". These vehicles bear a National Safety Code Number and are entered onto the National Safety Code Collision Monitoring Report.

"Truck greater than 4500 kilograms (unit chassis)"

- A vehicle category that includes all straight trucks with a gross vehicle mass 4,500 kg and over on the vehicle registration. This does not include truck tractors with a fifth wheel assembly.

"Power Unit for Semi-Trailer"

- A vehicle category that includes truck tractors used for the moving of cargo in or on a trailer by means of a fifth wheel connection. This does not include pickups equipped with a fifth wheel.

"Truck (Other)"

- A vehicle category used if the type and size of truck is unknown.

"School Bus"

- A vehicle category that includes a bus authorized for the transportation of students to or from school and related school activities.

"Transit Bus (Urban)"

- A vehicle category that includes a bus used for commercial carrying of passengers within an urban area.

"Inter-City Bus"

- A vehicle category that includes a bus licensed for inter-city or provincial travel.

"Bus (Other)"

- A vehicle category that includes personal use of buses and bus type conversions, but does not include original equipment manufacturer type; for example, buses converted to motor homes.

"Contributing Factor"

- Those circumstances or factors that the reporting police officer recorded as having contributed to the collision or its severity. Factors can be selected from four categories: driver action, human condition, vehicle condition, or environmental condition. The TAR allows for up to three contributing factors to be recorded for each driver or vehicle involved in the collision.

"At-fault Contributing Factor"

- A contributing factor where some action or condition other than "driving properly" and "apparently normal" has been noted.

"Driver Action"

- A category of contributing factors attributed to actions taken or performed by a driver immediately prior to a collision.

"Human Condition"

- A category of contributing factors attributed to the physical or mental condition of a driver immediately prior to a collision, most often that limit the driver's ability to drive safely or properly.

"Vehicle Condition"

- A category of contributing factors attributed to the physical condition of a vehicle immediately prior to a collision.

"Environmental Condition"

- A category of contributing factors attributed to environmental conditions (i.e., weather, road surface and animal actions) immediately prior to a collision.

Table 10-1 Commercial Vehicle Traffic Collisions by NSC Commercial Vehicle Category and Collision Severity

Table 10-1

NSC Commercial Vehicles Involved in Traffic Collisions by Vehicle Type and Collision Severity: 2008, 2003-2007 Average

Vehicle Category	2008 Collision Severity						2008 Total	% of 2008 Total	2003-2007 Average Count of Collisions				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
Truck >4500 kgs Unit Chassis	3	14.3%	113	12.6%	402	13.4%	518	13.2%	4	136	510	650	15.7%
Power Unit (Semi-Trailer)	11	52.4%	106	11.8%	367	12.2%	484	12.3%	12	138	456	606	14.7%
Truck - Other	6	28.6%	635	70.6%	2,063	68.6%	2,704	68.8%	7	563	2,053	2,623	63.5%
School Bus	0	-	8	0.9%	61	2.0%	69	1.8%	0	10	58	69	1.7%
Transit Bus - Urban	0	-	24	2.7%	43	1.4%	67	1.7%	0	24	49	73	1.8%
Para-Transit Bus	0	-	1	0.1%	3	<0.1%	4	0.1%	0	1	6	6	0.2%
Inter-City Bus	1	4.8%	8	0.9%	55	1.8%	64	1.6%	0	15	65	80	1.9%
Bus - Other	0	-	5	0.6%	15	0.5%	20	0.5%	0	5	18	23	0.5%
Total	21	100%	900	100%	3,009	100%	3,930	100%	23	892	3,215	4,130	100%

In 2008, there were 3,930 commercial vehicles involved in traffic collisions. Of these:

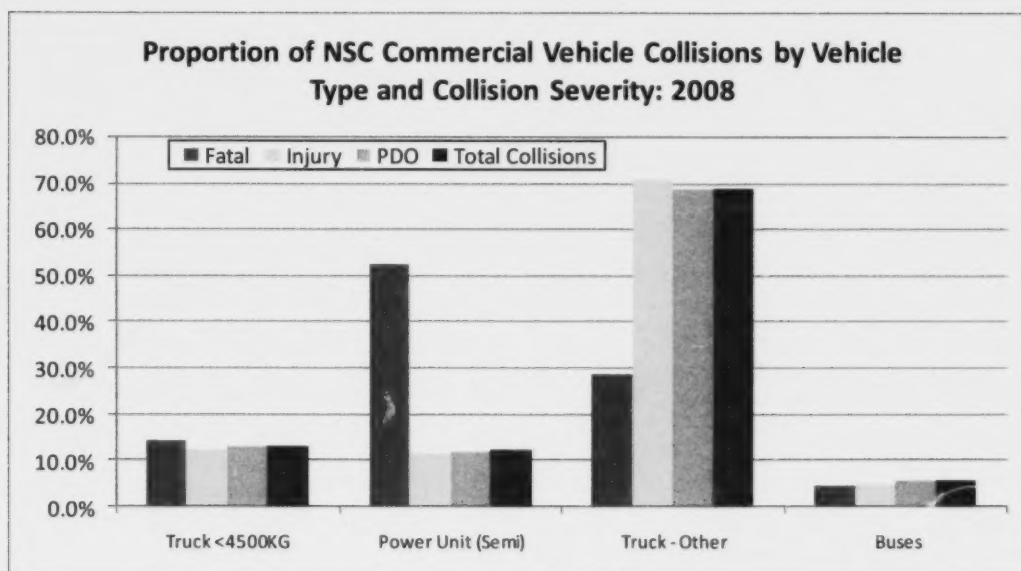
- 21 were involved in fatal collisions;
- 900 were involved in injury collisions; and,
- 3,009 were involved in PDO collisions.

Collisions involving commercial vehicles in 2008 have decreased by nearly 5% compared to the previous five years (2003 to 2007) on average.

- Fatal collisions decreased by nearly 9% (21 in 2008; 23 in 2003-2007 on average).
- Injury collisions remained relatively unchanged, increasing by about 1%.
- PDO collisions decreased by 6%.

NOTE: For a detailed historical count of NSC Commercial Vehicles involved in traffic collisions occurring in each year from 2003 to 2008, please refer to "Table 10-6 Historical Summary of NSC Commercial Vehicles Involved in Traffic Collisions by Vehicle Type: 2003 to 2008" at the end of this section.

Figure 10-1 Proportion of NSC Commercial Vehicles by Vehicle Type and Collision Severity



Semi-trucks make up the largest proportions of commercial vehicles involved in traffic collisions. In 2008, semis and other trucks made for a combined total of more than 80% of the commercial vehicles involved in traffic collisions.

- Semis account for more than half (52%) of the commercial vehicles involved in fatal collisions.
- "Other" trucks account for seven in ten commercial vehicles involved in injury (71%) and PDO (69%) collisions.

Table 10-2 Traffic Collision Victims by NSC Commercial Vehicle Type and Casualty Type

Table 10-2
Traffic Collision Victims Where an NSC Commercial Vehicle Was Involved by Vehicle Type and Casualty Type: 2008

Vehicle Type	2008 Casualty Type												2008 Total Victims	% of 2008 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Truck >4500 kgs Unit Chassis	2	10.5%	11	21.2%	62	15.0%	47	9.3%	9	5.6%	129	11.4%	131	11.4%
Power Unit (Semi-Trailer)	9	47.4%	17	32.7%	71	17.2%	47	9.3%	7	4.3%	142	12.6%	151	13.2%
Truck - Other	7	36.8%	21	40.4%	245	59.5%	395	78.5%	126	78.3%	787	69.8%	794	69.2%
School Bus	0	-	0	-	12	2.9%	1	0.2%	0	-	13	1.2%	13	1.1%
Transit Bus - Urban	0	-	2	3.8%	19	4.6%	9	1.8%	5	3.1%	35	3.1%	35	3.1%
Para-Transit Bus	0	-	0	-	0	-	0	-	1	0.6%	1	<0.1%	1	<0.1%
Inter-City Bus	1	5.3%	0	-	2	0.5%	2	0.4%	7	4.3%	11	1.0%	12	1.0%
Bus - Other	0	-	1	1.9%	1	0.2%	2	0.4%	6	3.7%	10	0.9%	10	0.9%
Total	19	100%	52	100%	412	100%	503	100%	161	100%	1,128	100%	1,147	100%

Table 10-2a Traffic Collision Victims by NSC Commercial Vehicle Type and Casualty Type for Previous Five Years

Table 10-2a

Traffic Collision Victims Where an NSC Commercial Vehicle Was Involved by Vehicle Type and Casualty Type: 2003-2007

Vehicle Type	2003-2007 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Truck >4500 kgs Unit Chassis	4	15	73	74	14	176	180	14.9%
Power Unit (Semi-Trailer)	12	24	90	49	15	178	190	15.8%
Truck - Other	8	32	287	337	92	749	757	62.8%
School Bus	0	1	8	6	1	15	16	1.3%
Transit Bus - Urban	0	3	15	11	2	30	30	2.5%
Para-Transit Bus	0	0	0	0	0	1	1	<0.1%
Inter-City Bus	0	2	6	10	6	24	24	2.0%
Bus - Other	0	0	4	3	0	7	8	0.6%
Total	25	76	483	489	131	1,179	1,204	100%

Traffic collisions where at least one commercial vehicle was involved resulted in a total of 1,147 victims in 2008, including:

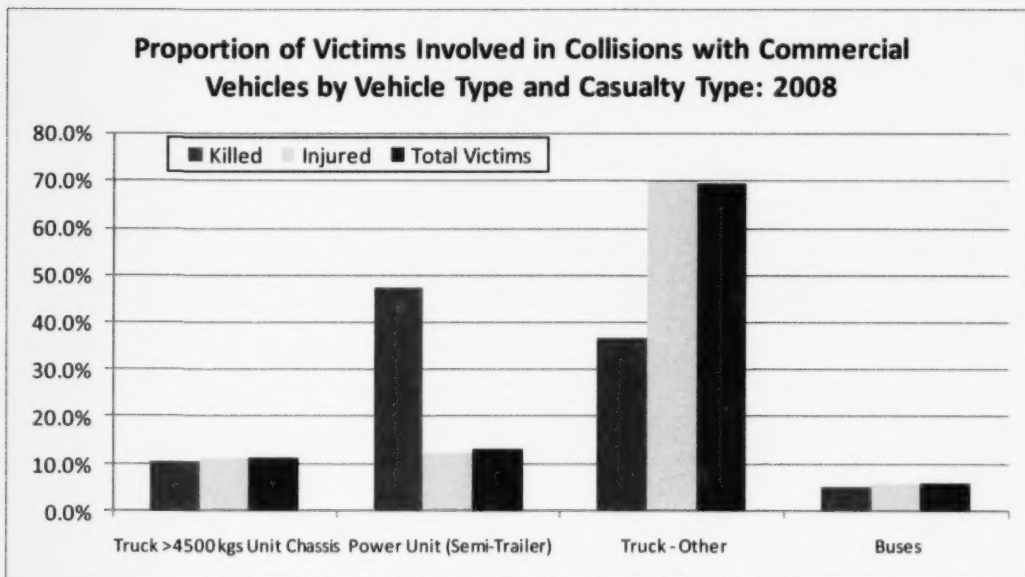
- 19 victims killed;
- 52 victims seriously injured; and
- 1,076 victims where the injury was minor, minimal or unspecified.

Collisions involving commercial vehicles in 2008 resulted in fewer victims than in the previous five years (2003 to 2007) on average. In 2008:

- The number of victims killed decreased by nearly 25% (19 in 2008; 25 in 2003-2007 on average);
- The overall number of victims injured decreased by 4% (1,128 in 2008; 1,179 in 2003-2007 on average); and,
- The number of victims seriously injured decreased by 32% (52 in 2008; 76 in 2003-2007 on average).

NOTE: For a detailed historical count of traffic collision victims where an NSC Commercial Vehicle was involved in each year from 2003 to 2008, please refer to "Table 10-7 Historical Summary of Traffic Collision Victims Where an NSC Commercial Vehicle Was Involved by Vehicle Type: 2003 to 2008" at the end of this section.

Figure 10-2 Proportion of Victims Involved in Collisions with NSC Commercial Vehicles by Vehicle Type and Casualty Type



Collisions involving semis and "other" trucks make up the largest proportion of vehicles involved in a collision where a victim was killed (47% and 37%, respectively). "Other" trucks account for the greatest proportion of victims injured (but not killed) in a collision where a commercial vehicle is involved.

Table 10-3 Commercial Vehicle Involvement in Traffic Collisions by Pre-Collision Activity and Collision Severity

Table 10-3

NSC Commercial Vehicles Involved in Traffic Collisions by Pre-Collision Activity and Collision Severity: 2008, 2003-2007 Average

Pre-Collision Activity	2008 Collision Severity						2008 Total	% of 2008 Total	2003-2007 Average Count of Vehicles				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
Going Straight Ahead	14	66.7%	498	55.3%	1,367	45.4%	1,879	47.8%	18	471	1,317	1,806	43.7%
Turning Left	2	9.5%	66	7.3%	221	7.3%	289	7.4%	1	66	208	275	6.6%
Turning Right	2	9.5%	39	4.3%	162	5.4%	203	5.2%	0	31	155	187	4.5%
Making U Turn	0	-	4	0.4%	8	0.3%	12	0.3%	0	3	10	13	0.3%
Changing Lanes – Left	0	-	8	0.9%	37	1.2%	45	1.1%	0	8	36	44	1.1%
Changing Lanes – Right	0	-	10	1.1%	36	1.2%	46	1.2%	0	8	44	51	1.2%
Merging	1	4.8%	9	1.0%	27	0.9%	37	0.9%	0	6	25	32	0.8%
Reversing	0	-	9	1.0%	122	4.1%	131	3.3%	0	8	234	242	5.9%
Overtaking	0	-	3	0.3%	8	0.3%	11	0.3%	0	9	18	27	0.7%
Slowing/Stopping on Roadway	0	-	23	2.6%	97	3.2%	120	3.1%	0	27	72	99	2.4%
Stopped in Traffic	0	-	92	10.2%	322	10.7%	414	10.5%	0	93	243	336	8.1%
Starting in Traffic	0	-	10	1.1%	16	0.5%	26	0.7%	0	7	17	24	0.6%
Leave Parking Position/Roadside	0	-	2	0.2%	9	0.3%	11	0.3%	0	2	16	19	0.5%
Enter Parking Position/Roadside	0	-	0	-	1	<0.1%	1	<0.1%	0	2	13	15	0.4%
Parked Legally	0	-	11	1.2%	120	4.0%	131	3.3%	0	12	236	248	6.0%
Parked Illegally	0	-	0	-	3	<0.1%	3	<0.1%	0	1	7	8	0.2%
Swerving	0	-	6	0.7%	16	0.5%	22	0.6%	1	11	20	32	0.8%
Other	0	-	0	-	0	-	0	-	0	0	0	1	
Not Applicable	2	9.5%	110	12.2%	437	14.5%	549	14.0%	0	128	543	671	16.2%
Total	21	10%	900	26%	3,009	31%	3,930	29%	23	892	3,215	4,130	33%

In 2008, the majority of NSC commercial vehicles involved in a collision were "going straight ahead" when the collision occurred (48% all collisions; 67% fatal collisions; 55% injury collisions; 45% PDO collisions). Over the previous five years (2003 to 2007), on average, "going straight ahead" was noted as the pre-collision action for 44% of all commercial vehicles involved in a collision. Other pre-collision actions of commercial vehicles in 2008 included:

- Being stopped or stopping ("stopped in traffic" and slowing/stopping on roadway" combined) – 14%; and,
- Turning ("turning left" and "turning right" combined) – 13%.

Considering fatal collisions, there are only two pre-collision actions noted in 2008, "going straight ahead" (67% of the commercial vehicles involved in a fatal collision) and turning ("turning left" and "turning right" combined – 19%).

Commercial vehicles involved in injury collisions in 2008 were noted most often as "going straight ahead" (55%). Other pre-collision actions of commercial vehicles involved in injury collisions include:

- Being stopped or stopping ("stopped in traffic" and slowing/stopping on roadway" combined) – 13%; and,
- Turning ("turning left" and "turning right" combined) – 12%.

Table 10.4 Commercial Driver Involvement in Traffic Collisions by At-Fault Human Condition and Collision Severity

Table 10.4

NSC Commercial Vehicles Involved in Traffic Collisions by Contributing Factors and Collision Severity 2008

Contributing Factor	2008 Collision Severity						Total	% of 2008 Total
	Total	Not at Fault	Minor	Not at Fault	Major	Not at Fault		
Driver Action: Driving Properly (e.g., Human Condition: Apparently Normal)	9	42.9%	289	32.1%	668	28.8%	1,166	29.7%
Driver Action: Driving properly	2	9.5%	39	4.5%	132	4.5%	171	4.4%
Any At-Fault Driver Action	7	33.3%	220	24.4%	500	18.7%	730	18.6%
Following too closely	0	-	22	2.4%	59	2.0%	81	2.1%
Turning improperly	0	-	17	1.2%	55	1.8%	66	1.7%
Exceeding speed limit	0	-	4	0.4%	4	0.1%	8	0.2%
Driving too fast for conditions	1	4.8%	46	5.1%	81	2.7%	128	3.3%
Unsafe operating speed (Too fast or too slow)	1	4.8%	14	1.6%	9	0.3%	24	0.6%
Passing improperly	0	-	2	0.2%	12	0.4%	14	0.4%
Changing lanes improperly	0	-	0	0.0%	29	1.0%	37	0.9%
Fail to yield right of way	2	9.5%	20	2.2%	62	2.1%	84	2.1%
Disobey traffic control device/officer	0	-	17	1.9%	28	0.9%	45	1.1%
Drive wrong way on roadway	0	-	0	-	1	0.0%	1	<0.1%
Passing a vehicle at pedestrian X-walk	0	-	0	-	0	-	0	-
Back unsafely	0	-	4	0.4%	55	1.8%	59	1.5%
Parking improperly	0	-	1	0.1%	2	0.0%	3	<0.1%
Careless Driving	1	4.8%	43	4.8%	38	1.3%	83	2.1%
Lost control/Drive off road	3	14.3%	60	6.6%	48	1.6%	99	2.5%
Brakeless vehicle ran out of control	0	-	0	-	1	0.0%	1	<0.1%
Leave stop sign before able to go on	1	4.8%	18	1.1%	13	0.4%	24	0.6%
Failed to signal	0	-	0	-	0	-	0	-
Take avoiding action	0	-	0	-	21	0.7%	21	0.5%
Driver inexperience	1	4.8%	11	1.2%	21	0.7%	33	0.8%
Pedestrian error/confusion	0	-	1	0.1%	0	-	1	<0.1%
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Contributing Factor	2008 Collision Severity						2008 Total	% of 2008 Total
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Human Condition - Apparently Normal	1	4.8%	134	14.9%	503	16.7%	638	16.2%
Any At-fault Human Condition	1	4.8%	52	5.8%	103	3.4%	156	4.0%
Loss of consciousness/Blackout prior to collision	0	-	3	0.3%	2	<0.1%	5	0.1%
Extreme fatigue/Fell asleep	0	-	5	0.6%	4	0.1%	9	0.2%
Defective eyesight	0	-	1	0.1%	0	-	1	<0.1%
Defective hearing	0	-	0	-	0	-	0	-
Medical disability	0	-	0	-	0	-	0	-
Physical disability	0	-	0	-	1	<0.1%	1	<0.1%
Mental disability	0	-	0	-	1	<0.1%	1	<0.1%
Mental confusion/Inability to remember	0	-	1	0.1%	0	-	1	<0.1%
Sudden illness	0	-	0	-	2	<0.1%	2	<0.1%
Ability impaired alcohol	0	-	9	1.0%	2	<0.1%	11	0.3%
Ability impaired drugs	0	-	0	-	0	-	0	-
Had been drinking/Suspected alcohol use	1	4.8%	1	0.1%	4	0.1%	6	0.2%
Distraction/Inattention	0	-	32	3.6%	90	3.0%	122	3.1%
Exceed hours of service (commercial drivers only)	0	-	0	-	0	-	0	-
No apparent (vehicle) defect	9	42.9%	414	46.0%	1,176	39.1%	1,599	40.7%
Any At-fault Vehicle Defect	0	-	9	1.0%	41	1.4%	50	1.3%
Defective brakes	0	-	0	-	7	0.2%	7	0.2%
Defective steering	0	-	0	-	1	<0.1%	1	<0.1%
Defective headlights	0	-	0	-	1	<0.1%	1	<0.1%
Defective brake lights	0	-	0	-	2	<0.1%	2	<0.1%
Defective lighting (unspecified)	0	-	0	-	1	<0.1%	1	<0.1%
Defective engine controls/drive train	0	-	2	0.2%	2	<0.1%	4	0.1%
Defective suspension/wheels	0	-	1	0.1%	0	-	1	<0.1%
Defective tires	0	-	0	-	5	0.2%	5	0.1%
Tow hitch/yoke defective	0	-	0	-	5	0.2%	5	0.1%
Defective exhaust system	0	-	0	-	0	-	0	-
Hood/tailgate/door/covering opened	0	-	0	-	1	<0.1%	1	<0.1%
Defective glazing (obscured windows)	0	-	0	-	0	-	0	-
Vehicle modifications	0	-	1	0.1%	0	-	1	<0.1%
Fire	0	-	0	-	0	-	0	-

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Contributing Factor	2008 Collision Severity						2008 Total	% of 2008 Total
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Overloaded/oversized	0	-	0	-	2	<0.1%	2	<0.1%
Load shifted/spilled	0	-	3	0.3%	9	0.3%	12	0.3%
Jack-knife/trailer swing	0	-	1	0.1%	6	0.2%	7	0.2%
Hydroplaning tires	0	-	1	0.1%	0	-	1	<0.1%
Any At-fault Environmental Condition	0	-	86	9.6%	442	14.7%	528	13.4%
Animal action - Wild	0	-	10	1.1%	179	5.9%	189	4.8%
Animal action - Domestic	0	-	4	0.4%	13	0.4%	17	0.4%
Slippery road surface	0	-	50	5.6%	176	5.8%	226	5.8%
Snow drift	0	-	3	0.3%	13	0.4%	16	0.4%
Obstruction/debris on roadway	0	-	0	-	8	0.3%	8	0.2%
View obstructed/limited	0	-	3	0.3%	18	0.6%	21	0.5%
Glare/reflection	0	-	2	0.2%	3	<0.1%	5	0.1%
Construction zone	0	-	1	0.1%	6	0.2%	7	0.2%
Defective driving surface	0	-	2	0.2%	3	<0.1%	5	0.1%
Shoulders defective	0	-	0	-	5	0.2%	5	0.1%
Lane markings inadequate	0	-	1	0.1%	1	<0.1%	2	<0.1%
Defective/inoperative traffic control device	0	-	1	0.1%	3	<0.1%	4	0.1%
Weather	0	-	8	0.9%	39	1.3%	47	1.2%
Pedestrian corridor in use	0	-	0	-	1	<0.1%	1	<0.1%
Uninvolved vehicle	0	-	1	0.1%	6	0.2%	7	0.2%
Uninvolved pedestrian	0	-	1	0.1%	1	<0.1%	2	<0.1%
Presence of prior accident	0	-	2	0.2%	3	<0.1%	5	0.1%
No contributing factor(s) identified	4	19.0%	259	28.8%	1,032	34.3%	1,295	33.0%
Total	21	100%	900	100%	3,009	100%	3,930	100%

*NOTE: Each vehicle and/or driver involved in a collision can have up to three contributing factors noted. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total.

Table 10-4a Commercial Driver Involvement in Traffic Collisions by At-Fault Human Condition and Collision Severity for the Previous Five Years

Table 10-4a

NSC Commercial Vehicles Involved in Traffic Collisions by Contributing Factors and Collision Severity: 2003 to 2007

Contributing Factor	2003-2007 Average Count of Drivers				
	Fatal	Injury	PDO	Total Drivers	% of Total Drivers
(Driver Action) Driving Properly and (Human Condition) Apparently Normal	7	281	932	1,220	29.5%
Driver Action - Driving properly	1	36	124	161	3.9%
Any At-fault Driver Action	9	210	580	799	19.3%
Following too closely	0	32	63	95	2.3%
Turning improperly	0	12	63	75	1.8%
Exceeding speed limit	1	2	6	9	0.2%
Driving too fast for conditions	0	37	90	127	3.1%
Unsafe operating speed (Too fast or too slow)	1	7	10	17	0.4%
Passing improperly	0	3	8	12	0.3%
Changing lanes improperly	0	7	32	39	0.9%
Fail to yield right of way	1	33	49	83	2.0%
Disobey traffic control device/officer	0	15	20	35	0.9%
Drive wrong way on roadway	0	0	2	3	<0.1%
Passing a vehicle at pedestrian X-walk	0	0	0	0	<0.1%
Back unsafely	0	4	112	115	2.8%
Parking improperly	0	1	8	9	0.2%
Careless Driving	2	17	31	50	1.2%
Lost control/Drive off road	2	26	52	80	1.9%
Driverless vehicle ran out of control	0	0	2	2	<0.1%
Leave stop sign before safe to do so	0	12	11	23	0.6%
Failed to signal	0	1	1	2	<0.1%
Take avoiding action	1	14	28	43	1.0%
Driver inexperience	1	10	28	39	1.0%
Pedestrian error/confusion	1	2	1	4	0.1%
Human Condition - Apparently Normal	5	157	517	679	16.4%
Any At-fault Human Condition	4	56	112	172	4.2%
Loss of consciousness/Blackout prior to collision	0	2	1	4	<0.1%
Extreme fatigue/Fell asleep	1	5	6	12	0.3%
Defective eyesight	0	0	1	1	<0.1%
Defective hearing	0	0	0	0	<0.1%
Medical disability	0	0	1	2	<0.1%
Physical disability	0	0	1	1	<0.1%
Mental disability	0	0	0	0	<0.1%
Mental confusion/Inability to remember	0	0	0	0	<0.1%
Sudden illness	0	1	1	1	<0.1%
Ability impaired alcohol	0	8	10	18	0.4%
Ability impaired drugs	0	0	0	1	<0.1%
Had been drinking/Suspected alcohol use	1	3	5	10	0.2%
Distraction/Inattention	2	38	87	126	3.1%
Exceed hours of service (commercial drivers only)	0	0	0	1	<0.1%

(Continued next page)

Section 10

NSC Monitoring Report

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Contributing Factor	2003-2007 Average Count of Drivers				
	Fatal	Injury	PDO	Total Drivers	% of Total Drivers
No apparent (vehicle) defect	12	418	1,290	1,720	41.6%
Any At-fault Vehicle Defect	1	15	50	65	1.6%
Defective brakes	0	3	7	11	0.3%
Defective steering	0	1	2	2	<0.1%
Defective headlights	0	1	0	1	<0.1%
Defective brake lights	0	0	1	1	<0.1%
Defective lighting (unspecified)	0	0	1	1	<0.1%
Defective engine controls/drive train	0	1	3	4	0.1%
Defective suspension/wheels	0	1	3	4	<0.1%
Defective tires	0	2	5	7	0.2%
Tow hitch/yoke defective	0	0	3	4	<0.1%
Defective exhaust system	0	0	1	1	<0.1%
Hood/tailgate/door/covering opened	0	0	2	2	<0.1%
Defective glazing (obscured windows)	0	0	1	1	<0.1%
Vehicle modifications	0	0	3	3	<0.1%
Fire	0	0	3	3	<0.1%
Overloaded/oversized	0	1	3	4	<0.1%
Load shifted/spilled	0	3	8	11	0.3%
Jack-knife/trailer swing	0	2	6	8	0.2%
Hydroplaning tires	0	0	0	0	<0.1%
Any At-fault Environmental Condition	2	117	476	594	14.4%
Animal action - Wild	0	15	199	214	5.2%
Animal action - Domestic	0	3	14	17	0.4%
Slippery road surface	1	67	181	248	6.0%
Snow drift	1	3	12	15	0.4%
Obstruction/debris on roadway	0	2	8	10	0.3%
View obstructed/limited	0	9	35	44	1.1%
Glare/reflection	0	3	4	7	0.2%
Construction zone	0	1	4	6	0.1%
Defective driving surface	0	7	15	22	0.5%
Shoulders defective	0	1	4	5	0.1%
Lane markings inadequate	0	0	0	0	<0.1%
Defective/inoperative traffic control device	0	0	1	1	<0.1%
Weather	0	15	33	49	1.2%
Pedestrian corridor in use	0	1	1	1	<0.1%
Uninvolved vehicle	0	2	7	9	0.2%
Uninvolved pedestrian	0	1	1	1	<0.1%
Presence of prior accident	0	1	1	3	<0.1%
No contributing factor(s) identified	3	255	1,141	1,399	33.9%
Total	23	892	3,215	4,130	100%

*NOTE: Each driver and/or vehicle involved in a collision can have up to three contributing factors noted. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total.

Drivers of commercial vehicles involved in traffic collisions are most often noted as "driving properly" and being "apparently normal" at the time of the collision. In 2008, half of commercial drivers involved in a collision were noted as ("driving properly and apparently normal" (30%), "driving properly" (4%) or "apparently normal" (16%)). Over the previous five years (2003 to 2007) on average, half of commercial drivers involved in collisions were noted with the same not at-fault factors.

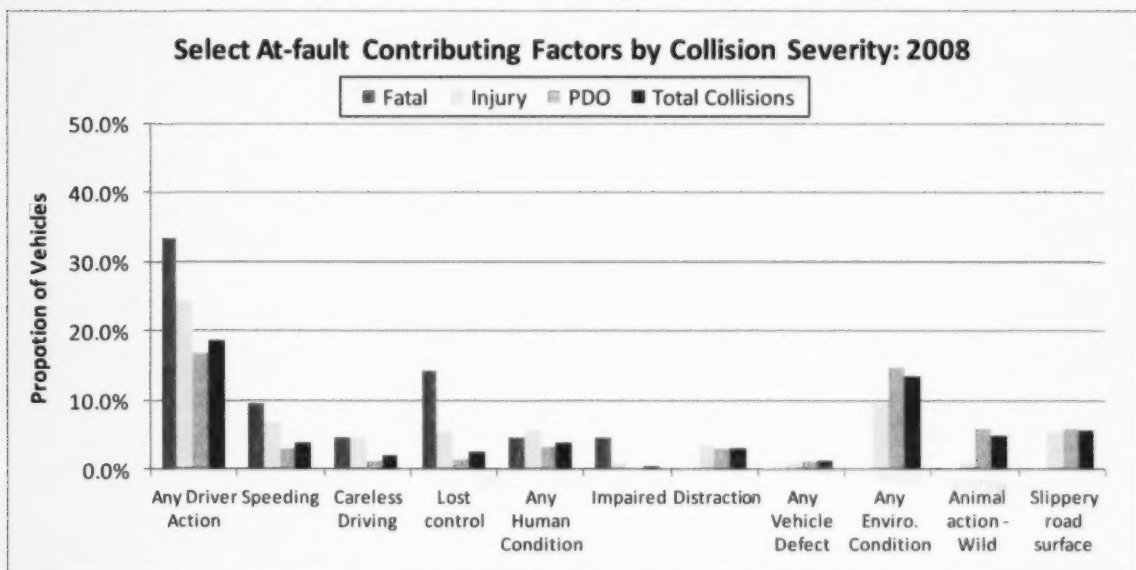
At-fault driver actions were recorded for 19% of the drivers of commercial vehicles involved in traffic collisions in 2008, unchanged from the previous five years (2003 to 2007) on average. At-fault human conditions were recorded for 16% of the drivers of commercial vehicles involved in traffic collisions in 2008, also unchanged from the previous five years (2003 to 2007) on average. Some of the specific at-fault driver action and human condition contributing factors noted for drivers of commercial vehicles involved in any traffic collision in 2008 include:

- "Speeding" – 4%;
- "Distraction/inattention" – 3%;
- "Lost control" – nearly 3%; and,
- "Careless driving" – 2%.

At-fault vehicle defects were recorded as contributing factors for only 1% of the commercial vehicles involved in a traffic collision in 2008. In the previous five years (2003 to 2007) on average, at-fault vehicle defects were recorded in nearly 2% of the commercial vehicles involved in traffic collisions.

Environmental conditions were recorded as contributing factors for 13% of the commercial vehicles involved in traffic collisions in 2008 (relatively unchanged from the previous five years, 2003 to 2007, on average – 14%). The two most common environmental conditions recorded for commercial vehicles involved in a traffic collision in 2008 were "slippery road surface" (6%) and the action of a wild animal (5%).

Figure 10-3 Select At-fault Contributing Factors for Commercial Vehicles and Drivers by Collision Severity



At-fault driver actions were recorded for a third (33%) of fatal collisions involving commercial vehicles in 2008.

Table 10-5 Vehicles Involved in Traffic Collisions by Load Type and Collision Severity

Table 10-5

Vehicles Involved in Traffic Collisions by Load Type and Collision Severity: 2008, 2003-2007 Average

Cargo or Hazardous Load	2008 Collision Severity						2008 Total	% of 2008 Total	2003-2007 Average Count of Collisions				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
Hazardous Load	3	2.1%	26	0.3%	50	0.1%	79	0.2%	1	21	54	76	0.1%
Explosives	0	-	5	<0.1%	11	<0.1%	16	<0.1%	0	4	14	18	<0.1%
Flammable Gases	0	-	10	<0.1%	15	<0.1%	25	<0.1%	0	7	21	28	<0.1%
Flammable/Combustible Liquids	1	0.7%	3	<0.1%	12	<0.1%	16	<0.1%	1	5	8	13	<0.1%
Flammable Solids/Dangerous when wet	0	-	3	<0.1%	1	<0.1%	4	<0.1%	0	1	2	3	<0.1%
Oxidizers/Organic peroxides	1	0.7%	0	-	0	-	1	<0.1%	0	0	0	1	<0.1%
Poisonous substances/Infectious	0	-	2	<0.1%	2	<0.1%	4	<0.1%	0	1	2	2	<0.1%
Radioactives	0	-	0	-	0	-	0	-	0	0	<1	<1	<0.1%
Corrosives	1	0.7%	0	-	4	<0.1%	5	<0.1%	0	1	3	3	<0.1%
Miscellaneous dangerous substances	0	-	3	<0.1%	5	<0.1%	8	<0.1%	0	3	5	8	<0.1%
General cargo (non-hazardous)	6	4.3%	96	0.9%	302	0.9%	404	0.9%	8	122	310	440	0.8%
Other/Unknown Load	0	-	0	-	6	<0.1%	6	<0.1%	0	1	3	4	<0.1%
Empty	3	2.1%	65	0.6%	316	0.9%	384	0.9%	3	74	218	294	0.5%
Not applicable/Non-commercial vehicle	129	91.5%	10,078	98.2%	33,612	98.0%	43,819	98.0%	129	11,554	41,383	53,066	98.5%
Total	141	100%	10,265	100%	34,286	100%	44,692	100%	140	11,773	41,967	53,880	100%

The type of load a vehicle was hauling at the time of a collision is noted for vehicles involved in a traffic collision in Manitoba. While Table 10-5 does not restrict itself to commercial vehicles alone, very few collisions in 2008, and historically, involve vehicles hauling hazardous or dangerous cargo.

In 2008, only 42 of 3,930 commercial vehicles involved in a traffic collision were noted as hauling a "hazardous" load (1%). Six percent of commercial vehicles involved in a traffic collision in 2008 were noted as hauling a "general cargo" load and 3% were noted as being empty at the time of the collision.

Considering only NSC commercial vehicles, in 2008:

- 2 4 of 21 involved in a fatal collision were hauling a "general" cargo load;
- 2 3 of 21 involved in a fatal collision were hauling a "hazardous" load;
- 5 13 of 900 involved in an injury collision were hauling a "hazardous" load; and,
- 5 26 of 3,009 involved in a PDO collision were hauling a "hazardous" load.

NOTE: For a detailed historical count of vehicles carrying specific loads when involved in a traffic collision in each year from 2003 to 2008, please refer to "Table 10-7 Historical Summary of Vehicles Involved in Traffic Collisions by Load Type: 2003 to 2008" at the end of this section.

Table 10-6 Historical Summary of NSC Commercial Vehicles Involved in Traffic Collisions by Vehicle Type**Table 10-6**

Historical Summary of NSC Commercial Vehicles Involved in Traffic Collisions by Vehicle Type: 2003 to 2008

Vehicle Category	2003 Total	% of 2003 Total	2004 Total	% of 2004 Total	2005 Total	% of 2005 Total	2006 Total	% of 2006 Total	2007 Total	% of 2007 Total	2008 Total	% of 2008 Total
Truck >4500 kgs Unit Chassis	664	20.5%	744	17.8%	647	14.1%	592	14.0%	601	13.6%	518	13.2%
Power Unit (Semi-Trailer)	588	18.2%	619	14.8%	643	14.1%	594	14.6%	587	13.3%	484	12.3%
Truck - Other	1,718	53.0%	2,570	61.3%	3,027	66.1%	2,840	67.0%	2,962	67.3%	2,704	68.8%
School Bus	84	2.6%	90	2.1%	81	1.8%	58	1.3%	75	1.7%	69	1.8%
Transit Bus - Urban	75	2.3%	88	1.9%	84	1.8%	72	1.7%	88	1.5%	67	1.7%
Rural Transit Bus	10	0.3%	9	0.1%	9	0.2%	1	0.1%	8	0.1%	4	0.1%
Inter City Bus	181	5.1%	88	1.9%	85	1.8%	81	1.8%	88	1.9%	64	1.6%
Bus - Other	21	0.6%	28	0.6%	28	0.4%	28	0.6%	21	0.5%	20	0.5%
Total	3,238	100%	4,180	100%	4,578	100%	4,241	100%	4,404	100%	3,930	100%

Table 10-7 Historical Summary of Traffic Collision Victims Where an NSC Commercial Vehicle Was Involved by Vehicle Type

Table 10-7

Historical Summary of Traffic Collision Victims Where an NSC Commercial Vehicle Was Involved by Vehicle Type: 2003 to 2008

Vehicle Category	2003 Total	% of 2003 Total	2004 Total	% of 2004 Total	2005 Total	% of 2005 Total	2006 Total	% of 2006 Total	2007 Total	% of 2007 Total	2008 Total	% of 2008 Total
Truck >4500 kgs Unit Chassis	175	17.5%	183	16.2%	183	14.1%	173	13.5%	184	14.0%	131	11.4%
Power Unit (Semi-Trailer)	205	20.5%	171	15.1%	212	16.4%	179	14.0%	183	13.9%	151	13.2%
Truck - Other	551	55.1%	691	61.2%	811	62.6%	850	66.5%	880	66.8%	794	69.2%
School Bus	9	0.9%	28	2.5%	20	1.5%	12	0.9%	9	0.7%	13	1.1%
Transit Bus - Urban	25	2.5%	28	2.5%	41	3.2%	30	2.3%	25	1.9%	35	3.1%
Para-Transit Bus	0	-	0	-	2	0.2%	0	-	1	<0.1%	1	<0.1%
Inter-City Bus	23	2.3%	18	1.6%	21	1.6%	31	2.4%	29	2.2%	12	1.0%
Bus - Other	12	1.2%	10	0.9%	6	0.5%	4	0.3%	6	0.5%	10	0.9%
Total	1,000	100%	1,129	100%	1,296	100%	1,279	100%	1,317	100%	1,147	100%

Table 10-8 Historical Summary of Vehicles Involved in Traffic Collisions by Load Type

Table 10-8
 Historical Summary of Vehicles Involved in Traffic Collisions by Load Type: 2003 to 2008

Vehicle Category	2003 Total	% of 2003 Total	2004 Total	% of 2004 Total	2005 Total	% of 2005 Total	2006 Total	% of 2006 Total	2007 Total	% of 2007 Total	2008 Total	% of 2008 Total
Hazardous Load	83	0.1%	98	0.2%	71	0.1%	70	0.1%	60	0.1%	79	0.2%
Explosives	23	<0.1%	20	<0.1%	15	<0.1%	16	<0.1%	14	<0.1%	16	<0.1%
Flammable Gases	28	<0.1%	33	<0.1%	30	<0.1%	23	<0.1%	26	<0.1%	25	<0.1%
Flammable/Combustible Liquids	10	<0.1%	21	<0.1%	15	<0.1%	11	<0.1%	8	<0.1%	16	<0.1%
Flammable Solids/Dangerous when wet	1	<0.1%	3	<0.1%	1	<0.1%	5	<0.1%	3	<0.1%	4	<0.1%
Oxidizers/Organic peroxides	0	-	3	<0.1%	1	<0.1%	0	-	0	-	1	<0.1%
Poisonous substances/Infectious	5	<0.1%	4	<0.1%	1	<0.1%	2	<0.1%	0	-	4	<0.1%
Radioactives	0	-	0	-	0	-	0	-	1	<0.1%	0	-
Corrosives	3	<0.1%	4	<0.1%	5	<0.1%	3	<0.1%	2	<0.1%	5	<0.1%
Miscellaneous dangerous substances	13	<0.1%	10	<0.1%	3	<0.1%	10	<0.1%	6	<0.1%	8	<0.1%
General cargo (non-hazardous)	433	0.8%	430	0.7%	472	0.9%	411	0.8%	452	0.9%	404	0.9%
Other/Unknown Load	2	<0.1%	4	<0.1%	7	<0.1%	6	<0.1%	2	<0.1%	6	<0.1%
Empty	262	0.5%	312	0.5%	303	0.6%	283	0.5%	311	0.6%	384	0.9%
Not applicable/Non-commercial vehicle	56,599	98.6%	56,497	98.4%	53,580	98.3%	50,919	98.4%	47,735	98.2%	43,819	97.9%
Total	57,379	100%	57,439	100%	54,504	100%	51,759	100%	48,620	100%	44,771	100%



SECTION 11 – Off-Road Vehicle Collisions



Introduction

This section counts the number of off-road vehicle (ORV) collisions in Manitoba and provides detail for collisions of different severity, fatal, injury and property damage only (PDO). Historical information regarding the number of ORV collisions, the number of victims, the number of vehicles and the number of drivers involved over the ten year period 1999 to 2008 is presented. Details are provided for 2008 ORV collisions in terms of the month of occurrence, day of the week, time of day, weather and road conditions, location and type of collision.

Key Highlights

In 2008, there were 137 off-road vehicle collisions, involving 106 victims, 166 vehicles, and 166 drivers. Of these:

- 10 were fatal collisions, with 11 victims killed, involving 13 vehicles and 13 drivers;
- 75 were injury collisions, with 95 victims injured, 89 vehicles involved and 89 drivers;
- 52 were PDO collisions, involving 64 vehicles and 64 drivers.

ORV collisions were most likely to occur:

- In winter months (December to March) representing 78 of 137 collisions (57%), with a smaller spike during summer (May to August), with 46 collisions (34% of the total).
- On weekends (all day Friday, Saturday and Sunday) representing 91 of 137 (67%) ORV collisions.
- During conditions of daylight, representing 95 of 137 (71%) ORV collisions.
- In the Eastern Region of Manitoba, representing 63 of 137 (49%) ORV collisions.
- In the 25 to 54 year old driver age group, representing 81 of 166 (49%) drivers involved in ORV collisions.

Notwithstanding the overall collision trends, **fatal** ORV collisions were most likely to occur:

- In summer months (June through August), representing 6 of 10 (60%) fatal ORV collisions.
- During dusk and darkness, representing 7 of 10 (70%) fatal ORV collisions.
- In the South Central Region of Manitoba, representing 5 of 10 (50%) fatal ORV collisions.
- In the 16 to 24 year old driver age group, representing 7 of 13 (54%) drivers in fatal ORV collisions.

Major Elements Examined

Counts of off-road vehicle (ORV) collisions in Manitoba for 2008 and previous years are taken from Traffic Accident Reports completed by law enforcement agencies and compiled by Manitoba Public Insurance. These counts are presented for all reportable collisions, for fatal collisions, for injury collisions and for property damage only (PDO) collisions. As these collisions occur primarily outside of roadways and road rights-of-way, they are generally not included in the Traffic Accident Database. However, some ORV collisions are included in the Traffic Accident Database; therefore, statistics between this and other sections of this report are not additive.

Collisions, victims, vehicles and drivers are presented separately at the beginning of this section with historical counts provided for the years 1999 through 2008. The remainder of this section explores ORV collisions occurring in 2008 and provides average counts of collisions for the time period 2003 to 2007 (or 2005 to 2007, where statistics are unavailable in other years) as a comparison to 2008 collisions.

It is important to note that the number of fatal or injury collisions is not equal to the number of fatal or injured victims as each collision can result in multiple victims. Likewise, the number of vehicles involved is not necessarily equal to the number of drivers involved as a driverless vehicle could be involved in a collision.

No statistics are calculated for relative involvement for off-road vehicles, as they are for traffic collisions in other sections of this report. This is due to the fact that ORVs are often not required to be registered, making base populations difficult to determine, and similarly, riders/operators often do not need to be licensed, making establishing a base population difficult to determine.

"Drivers" in this section refers to the number of drivers of off-road vehicles involved in collisions. It excludes pedestrians, other types of vehicles, and driverless vehicles.

The terms 'crash', 'collision' and 'accident' are used interchangeably in this report. The terms 'fatal' and 'killed' are used interchangeably in this report.

The reader is cautioned that not all percentages and calculations in the following tables will add to 100% of the total noted. Rounding error will often produce a difference of one or two percentage points. Likewise, average calculations are presented for historical data from the years 2003 to 2007. Rounding error in these calculations will cause individual average counts not to add to total average counts in some cases.

When reviewing the "Contributing Factors" for a traffic collision, the reader is cautioned to note that more than one contributing factor can be recorded for each collision. The total count of contributing factors noted will add to more than the number of collisions, vehicles or victims in those crashes.

Terms and Definitions

"Reportable Collision"

- Motor vehicle collisions resulting in a fatality, injury or property damage in excess of \$1,000 are required by law to be reported to a law enforcement agency. Subsequently, the law enforcement agency completes a Traffic Accident Report (TAR) for the collision. This report deals with these reportable collisions and the TARs arising from them.

"Off-road Vehicle (ORV)"

- One of several vehicle types designed for off-road use. It includes snowmobiles, off-road motorcycles, all-terrain vehicles (ATVs), amphibious vehicles, dune/sport buggies, and 4-wheel drive vehicles operated off-road.

"ATV"

- All Terrain Vehicle; includes vehicles with 3, 4 and 6 wheels.

"Collision severity"

- A classification of a collision based on the most severe result of the collision, i.e., whether someone was killed (fatal), injured (injury) or property damage only (PDO) occurred.

"Fatal Collision"

- A motor vehicle collision in which at least one person is killed as a result of the collision. The death must have occurred within thirty days of the collision occurrence.

"Injury Collision"

- A motor vehicle collision in which at least one person has been recorded as sustaining some level of personal injury, but in which no one is fatally injured or killed. Levels of injury include: 'major' (admitted to hospital); 'minor' (treated and released from hospital); and, 'minimal' (no hospital treatment required).

"Property Damage Only (PDO) Collision"

- A motor vehicle collision in which no injury or fatality is sustained and only property damage is the result.

"Casualty Type"

- A classification of the severity of the injury sustained by a victim in a traffic collision, i.e., whether someone was killed or injured. This classification also includes a designation for the severity of each non-fatal (i.e., victims injured but not killed) injury sustained.

"Killed"

- The casualty type "killed" indicates where the victim involved in the traffic collision died as a result of their injuries within thirty days of the collision occurrence.

"Injured"

- The casualty type "injured" indicates where the victim sustained some level of personal injury, but in which they were not killed. Levels of injury include: 'serious' or 'major' (admitted to hospital); 'minor' (treated and released from hospital); and, 'minimal' (no hospital treatment required). 'Other' injury is noted when the severity of the victim's injuries is not known or recorded in the TAR.

"Collision Type"

- Refers to the object struck by a motor vehicle during a collision (including: a pedestrian, another motor vehicle, a train, a motorcycle, a bicycle, an animal, and fixed objects) or to what happened to the vehicle in a single-vehicle collision (including: overturned on roadway and ran off roadway).

"Light Condition"

- Describes the light conditions at the scene of the accident, including:
 - Day – the light conditions which normally occur between one half hour after sunrise and one half hour before sunset;
 - Dawn – the light conditions which normally occur between one half hour before sunrise and one half hour after sunrise;
 - Dusk – the light conditions which normally occur between one half hour before sunset and one half hour after sunset;
 - Dark – the light conditions which normally occur between one half hour after sunset and one half hour before sunrise; and,
 - Artificial lighting – artificial illumination devices were functioning at the accident site under light conditions which normally occur between one half hour after sunset and one half hour before sunrise.

"Weather Condition"

- Describes the weather conditions prevalent at the time of the accident, including:
 - Clear – bright conditions, without precipitation or airborne matter, are recorded as clear;
 - Cloudy – dull, overcast conditions, without precipitation or airborne matter, are recorded as cloudy;
 - Raining – raining (self explanatory);
 - Snowing – snowing (self explanatory);
 - Fog or Mist – airborne matter, of natural origin, which obscures visibility;
 - Smoke or Dust – airborne matter, of a natural or artificial origin, which obscures visibility;
 - Freezing Rain / Sleet / Hail – freezing rain, sleet or hail (self explanatory);
 - Drifting Snow – snow drifting on or above roadway, which obscures visibility of the roadway, road markings, traffic devices or roadway fixtures; and,
 - Strong Winds – used if wind was a contributing factor in the accident.

"Region"

- Manitoba Infrastructure and Transportation is served by 5 regional office locations, each responsible for a geographic region (for boundaries, see Map 11-1). Regions are used in this section to indicate in which region a collision occurred.

"Contributing Factor"

- Refers to circumstances or factors that the reporting police officer recorded as having contributed to the collision or its severity. Factors can be selected from four categories: driver action, human condition, vehicle condition, or environment condition. More detail regarding "contributing factors" can be found in "Section 9 Contributing Factors" of this report.

"At-fault Contributing Factor"

- A contributing factor that the reporting police officer recorded as having contributed to the collision or its severity where the factor is not "driving properly" or "apparently normal".

Table 11-1 Ten Year Summary of Off-Road Vehicle Collisions

Table 11-1
Ten Year Summary of Off-Road Vehicle Collisions: 1999 to 2008

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2003-07 Average
Total Collisions	110	116	113	100	123	139	162	176	132	137	146
Fatal	8	9	9	4	7	7	9	9	6	10	8
Injury	76	64	72	62	80	81	104	107	78	75	90
PDO	26	43	32	34	36	51	49	60	48	52	49
Total Victims	104	89	99	91	109	107	131	142	103	106	118
Killed	8	10	10	5	7	7	9	9	6	11	8
Injured	96	79	89	86	102	100	122	133	97	95	111
Total Vehicles Involved	142	164	151	129	149	188	206	228	174	166	189
Fatal	9	17	13	8	8	9	11	12	8	13	10
Injury	99	85	95	73	92	111	134	138	98	89	115
PDO	34	62	43	48	49	68	61	78	68	64	65
Total Drivers Involved	139	163	141	127	148	188	206	228	174	166	189
Fatal	9	15	13	7	8	9	11	12	8	13	10
Injury	97	84	87	73	91	111	134	138	98	89	114
PDO	33	64	41	47	49	68	61	78	68	64	65

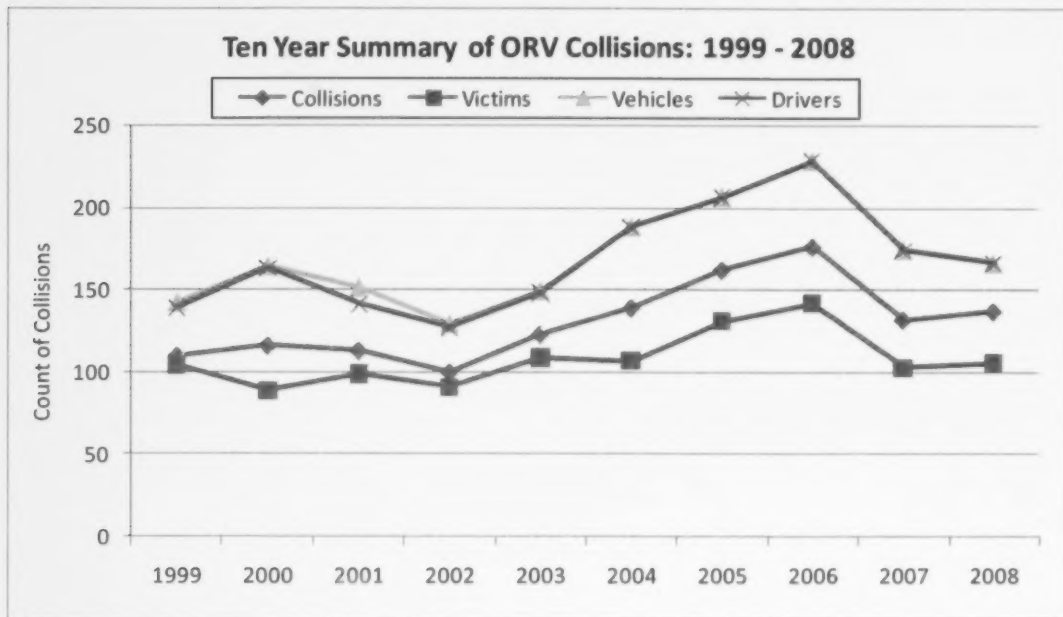
In 2008, there were 137 off-road vehicle collisions, involving 106 victims, 166 vehicles, and 166 drivers. Of these:

- 10 were fatal collisions, with 11 victims killed, involving 13 vehicles and 13 drivers;
- 75 were injury collisions, with 95 victims injured, 89 vehicles involved and 89 drivers;
- 52 were PDO collisions, involving 64 vehicles and 64 drivers.

Total ORV collisions in 2008 are 4% higher than 2007 and 6% lower than the average number of collisions in the previous five years (2003 to 2007). Compared to the previous five year average, in 2008:

- Total victims are down 10%;
- There were 3 more victims killed; and,
- Total vehicles involved and total drivers involved declined by 12%, each.

Figure 11-1 Ten Year Summary of ORV Collisions



The numbers of ORV collisions and victims in those collisions have both increased slightly in 2008 from 2007. At the same time, the numbers of vehicles and drivers involved in those collisions have decreased. In 2008, the numbers are down from a peak in 2006. Prior to then, there had been steady increases since 2002. Total collisions, victims, vehicles and drivers involved in 2008 are slightly higher than they were in 1999.

Table 11-2 Off-Road Vehicle Collisions by Vehicles Involved

Table 11-2
Off-Road Vehicle Collisions by Vehicles Involved: 2008, 2003-2007 Average

	2008					2003-07 Average					% Change 2008 to 2003-07 Average				
	Snowmobile	ATV	Motorcycle	Other*	Total	Snowmobile	ATV	Motorcycle	Other	Total	Snowmobile	ATV	Motorcycle	Other*	Total
Total Victims	38	44	5	19	106	52	39	7	20	118	-27.2%	12.8%	-26.5%	-6.9%	-10.5%
Killed	2	6	1	2	11	3	3	1	1	8	-23.1%	100.0%	0.0%	100.0%	44.7%
Injured	36	38	4	17	95	50	36	6	19	111	-27.4%	5.6%	-31.0%	-12.4%	-14.3%
Total Vehicles Involved	74	51	7	34	166	96	50	9	34	189	-22.6%	1.2%	-22.2%	0.0%	-12.2%
Fatal	2	5	1	5	13	3	4	1	2	10	-33.3%	31.6%	-16.7%	212.5%	35.4%
Injury	38	32	6	13	89	56	34	7	18	115	-31.7%	-6.4%	-11.8%	-27.8%	-22.3%
PDO	34	14	0	16	64	37	12	1	14	65	-8.1%	12.9%	-100.0%	11.1%	-1.2%
Total Drivers Involved	74	51	7	34	166	96	50	9	34	189	-22.6%	1.2%	-22.2%	0.6%	-12.1%
Fatal	2	5	1	5	13	3	4	1	2	10	-33.3%	31.6%	-16.7%	212.5%	35.4%
Injury	38	32	6	13	89	56	34	7	18	114	-31.7%	-6.4%	-11.8%	-27.0%	-22.2%
PDO	34	14	0	16	64	37	12	1	14	65	-8.1%	12.9%	-100.0%	11.1%	-1.2%

* 'Other' includes: vehicles not registered as an off-road vehicle, dune /sport buggy, 4 wheel drive motor vehicle (operated off-road), amphibious vehicle, and those listed under "not stated" category.

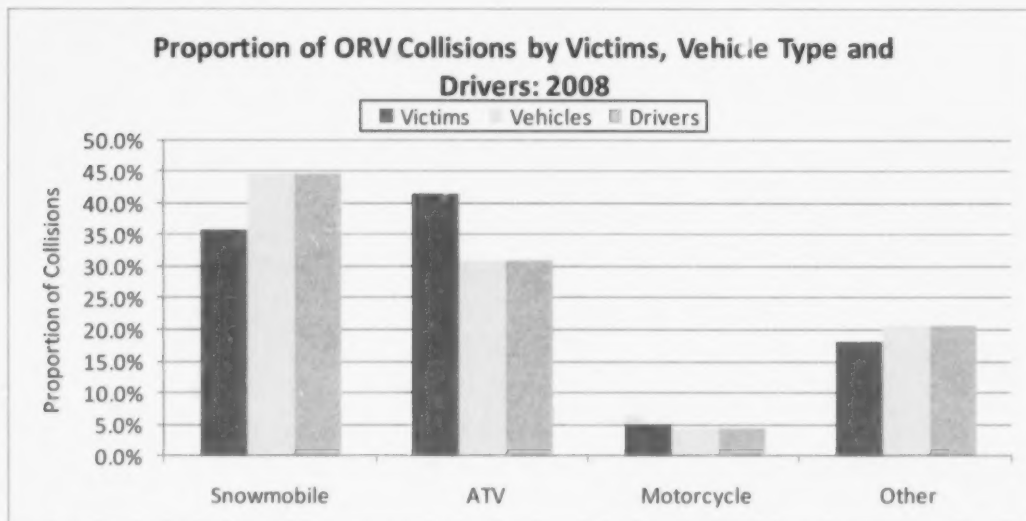
In 2008, a total of 166 vehicles were involved in off-road collisions, including:

- 74 snowmobiles and snowmobile drivers, resulting in 38 victims, including 2 killed;
- 51 ATVs and ATV drivers, resulting in 44 victims including 6 killed;
- 7 motorcycles and motorcycle drivers, resulting in 5 victims, including 1 killed.
- 34 'Other' ORVs and 34 drivers of those vehicles, resulting in 19 total victims, including 2 killed.

Compared to the previous five years (2003 to 2007) on average, in 2008:

- Snowmobile collisions are well below average across all categories - victims are down by 27%, while vehicles and drivers involved are down 23%.
- ATV collisions increased slightly – victims are up 13%, vehicles and drivers are up 1%. However, the number of victims killed in ATV collisions (6) is twice the historical average.
- Motorcycle collisions are below average across all categories – the total number of victims (5) is two less than average; the total count of vehicles and drivers involved (7 each) is two less than average.
- 'Other' vehicle collisions are relatively similar to previous years.

Figure 11-2 Proportion of ORV Collisions by Victims, Vehicle Type and Drivers



In 2008, snowmobiles accounted for the largest proportion of drivers and vehicles involved in collisions, followed by ATVs. However, ATV collisions account for a greater proportion of victims (including victims killed). 'Other' ORVs and motorcycles operated off-road account for the third largest and the smallest proportions, respectively, of victims, vehicles and drivers involved in ORV collisions.

Table 11-3 ORVs Involved in Collisions by Vehicle Type and Active Registration

Table 11-3
ORVs Involved in Collisions by Vehicle Type and Active Registration: 2008, 2005-2007
Average

Vehicle Type	Active Registration			Total	% Known to be Registered**	2005-07 Average	% Change 2008 to 2005-07 Average
	Yes	No	Not Stated				
Snowmobile	59	5	10	74	79.7%	105	-29.3%
ATV	29	7	15	51	56.9%	51	-0.6%
Motorcycle	2	1	4	7	28.6%	9	-25.0%
Other*	28	2	4	34	82.4%	37	-8.9%
Total	118	15	33	166	71.1%	203	-18.1%

* 'Other' includes: vehicles not registered as an off-road vehicle, dune /sport buggy, 4 wheel drive motor vehicle (operated off-road), amphibious vehicle, and those listed under "not stated" category.

** The "% known to be registered" is calculated as active registrations ("Yes" in the table) as a proportion of total ORVs in the category. "Not stated" is included in the total but are not considered as known to be registered.

A substantial number of off-road vehicles involved in collisions are not registered (29%). In 2008, 118 of 166 off-road vehicles involved in collisions (71%) had active registrations at the time of the collision. At the time of the collision in 2008:

- 59 of 74 snowmobiles (80%) had active registrations;
- 29 of 51 ATVs (57%) had active registrations;
- 2 of 7 motorcycles (29%) had active registrations; and
- 28 of 34 'other' vehicles, including on-road vehicles operating off-road at the time, (82%) had active registrations.

NOTE: 'Active registration' has only been compiled for ORV collisions since 2005. Historical averages are presented for the three-year period between 2005 and 2007 only.

NOTE: For a detailed historical count of ORV vehicle types involved in collisions occurring in each year from 2005 to 2008, please refer to "Table 11-18 Historical Summary of ORVs Involved in Collisions by Vehicle Type and Active Registration: 2005 to 2008" at the end of this section.

Table 11-4 Drivers Involved in ORV Collisions by Active Driver's Licence and Collision Severity

Table 11-4
Drivers Involved in ORV Collisions by Active Driver's License and Collision Severity: 2008, 2005-2007 Average

Active Driver's License	Collision Severity						2008 Total	% of 2008 Total	2005-07 Average	% Change 2008 to 2005-07 Average
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO				
Yes	7	53.8%	59	66.3%	51	79.7%	117	70.5%	144	-18.8%
No	3	23.1%	18	20.2%	5	7.8%	26	15.7%	42	-37.6%
Not Stated	3	23.1%	10	11.2%	8	12.5%	21	12.7%	13	61.5%
Not Applicable	0	-	2	2.2%	0	-	2	1.2%	4	-50.0%
Total	13	100%	89	100%	64	100%	166	100%	203	-18.1%

Section 11

Off-Road Vehicle Collisions

Unlicensed drivers (including operators too young to be licensed) account for a large proportion of ORV collisions. In 2008, 71% of drivers in ORV collisions had active driver's licenses; 16% did not. Fatal and Injury collisions account for a higher proportion of unlicensed drivers than PDO collisions.

- Fatal collisions: 54% of drivers were licensed and 23% were unlicensed (23% not stated).
- Injury collisions: 66% of drivers were licensed and 20% were unlicensed (11% not stated and 2% not applicable).
- PDO collisions: 80% of drivers were licensed and 8% were unlicensed (13% not stated).

Table 11-5 Off-Road Vehicle Collisions by Month of Occurrence and Collision Severity

Table 11-5

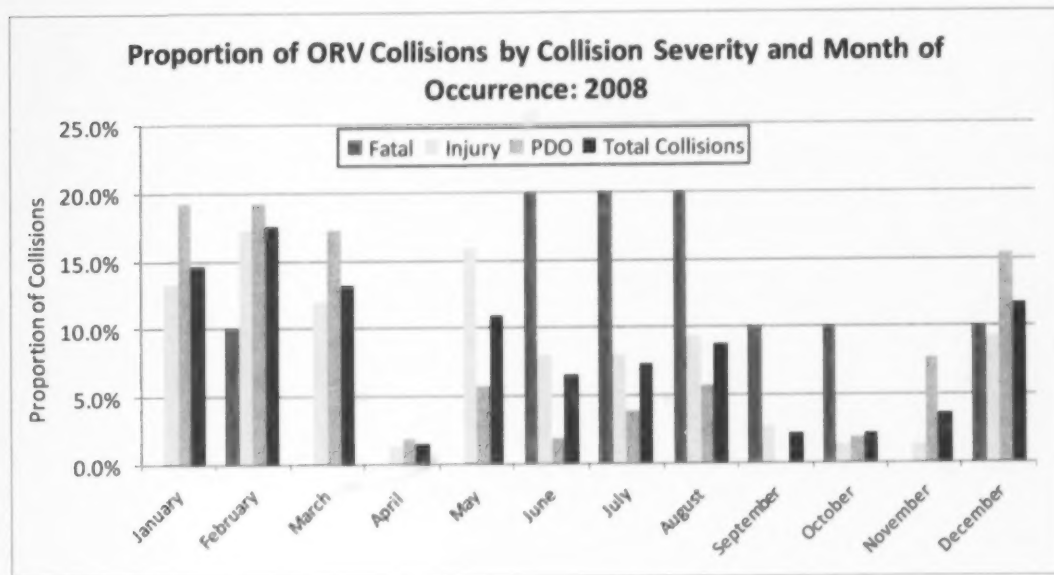
ORV Collisions by Month of Occurrence and Collision Severity: 2008, 2003-2007 Average

Month	Collision Severity						2008 Total	% of 2008 Total	2003-07 Average	% Change 2008 to 2003-07 Average
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO				
January	0	-	10	13.3%	10	19.2%	20	14.6%	19	4.2%
February	1	10.0%	13	17.3%	10	19.2%	24	17.5%	23	6.2%
March	0	-	9	12.0%	9	17.3%	18	13.1%	21	-15.9%
April	0	-	1	1.3%	1	1.9%	2	1.5%	9	-76.7%
May	0	-	12	16.0%	3	5.8%	15	10.9%	9	66.7%
June	2	20.0%	6	8.0%	1	1.9%	9	6.6%	9	4.7%
July	2	20.0%	6	8.0%	2	3.8%	10	7.3%	10	4.2%
August	2	20.0%	7	9.3%	3	5.8%	12	8.8%	9	33.3%
September	1	10.0%	2	2.7%	0	-	3	2.2%	7	-58.3%
October	1	10.0%	1	1.3%	1	1.9%	3	2.2%	6	-53.1%
November	0	-	1	1.3%	4	7.7%	5	3.6%	4	31.6%
December	1	10.0%	7	9.3%	8	15.4%	16	11.7%	21	-23.8%
Total	10	100%	75	100%	52	100%	137	100%	146	-6.4%

Winter and early spring account for the most ORV collisions in 2008; January (15%), February (18%), March (13%) and December (12%), combined, account for nearly six of every ten ORV collisions.

Similar to the previous five years (2003 to 2007) on average, there are peaks and valleys in the number of ORV collisions by individual month. April saw a marked decrease (2 compared to 9 on average) which may represent poor riding conditions for both snowmobiles and summer vehicles such as ATVs. This low was nearly offset by an above average May (15 collisions compared to 9 on average). September and October were below seasonal averages as well (3 each month compared to 7 and 6 on average, respectively).

NOTE: For a detailed historical count of ORV collisions by month of occurrence in each year from 2003 to 2008, please refer to "Table 11-19 Historical Summary of ORV Collisions by Month of Occurrence: 2003 to 2008" at the end of this section.

Figure 11-3 Distribution of Total Off-Road Vehicle Collisions by Month of Occurrence

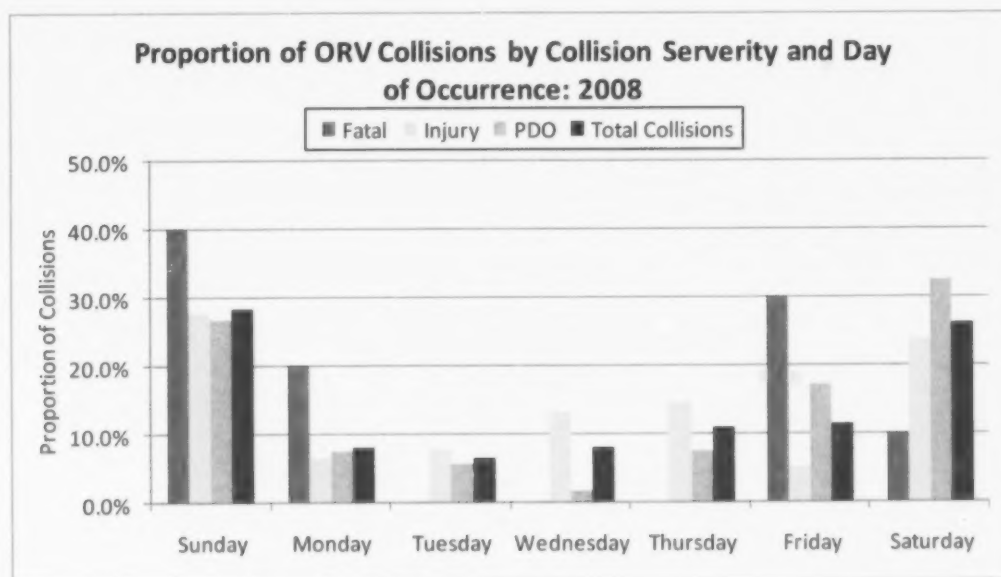
When collisions are broken out by severity, seasonal differences are apparent. The winter months (December through March) account for 57% of total collisions, but only 20% of fatal collisions. Conversely, the months of June through August account for only 23% of total collisions but 60% of fatal collisions. This result can be compared with the breakdown of collisions by off-road vehicle type (Table 11-2 and Figure 11-2) which show that snowmobile collisions are the most common type of ORV collisions but a smaller proportion of these are fatal than in ATV and other ORV collisions.

Table 11-6 Off-Road Vehicle Collisions by Day of Occurrence and Collision Severity

Table 11-6
 ORV Collisions by Day of Occurrence and Collision Severity: 2008, 2005-2007 Average

Day	Collision Severity						2008 Total	% of 2008 Total	2003-07 Average	% Change 2008 to 2003-07 Average
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO				
Sunday	4	40.0%	21	28.0%	14	26.9%	39	28.5%	36	7.1%
Monday	2	20.0%	5	6.7%	4	7.7%	11	8.0%	11	1.9%
Tuesday	0	-	6	8.0%	3	5.8%	9	6.6%	11	-15.1%
Wednesday	0	-	10	13.3%	1	1.9%	11	8.0%	13	-12.7%
Thursday	0	-	11	14.7%	4	7.7%	15	10.9%	12	27.1%
Friday	3	30.0%	4	5.3%	9	17.3%	16	11.7%	21	-25.2%
Saturday	1	10.0%	18	24.0%	17	32.7%	36	26.3%	42	-13.5%
Total	10	100%	75	100%	52	100%	137	100%	146	-6.4%

Weekends, including all day Friday, Saturday and Sunday, account for most ORV collisions. In 2008, 12% of ORV collisions occurred on Friday, 26% on Saturday and 29% on Sunday. Monday through Thursday account for a third (33%) of ORV collisions.

Figure 11-4 Proportion of ORV Collisions by Collision Severity and Day of Occurrence

Weekends, including all day Friday, Saturday and Sunday, account for 80% of all fatal ORV collisions in 2008. Sunday accounts for 40% of fatal ORV Collisions and Friday accounts for 30%. Saturday accounts for the highest proportion of PDO collisions involving ORVs.

Table 11-7 Off-Road Vehicle Collisions by Time of Occurrence and Collision Severity

Table 11-7
ORV Collisions by Time of Occurrence and Collision Severity: 2008, 2003-2007 Average

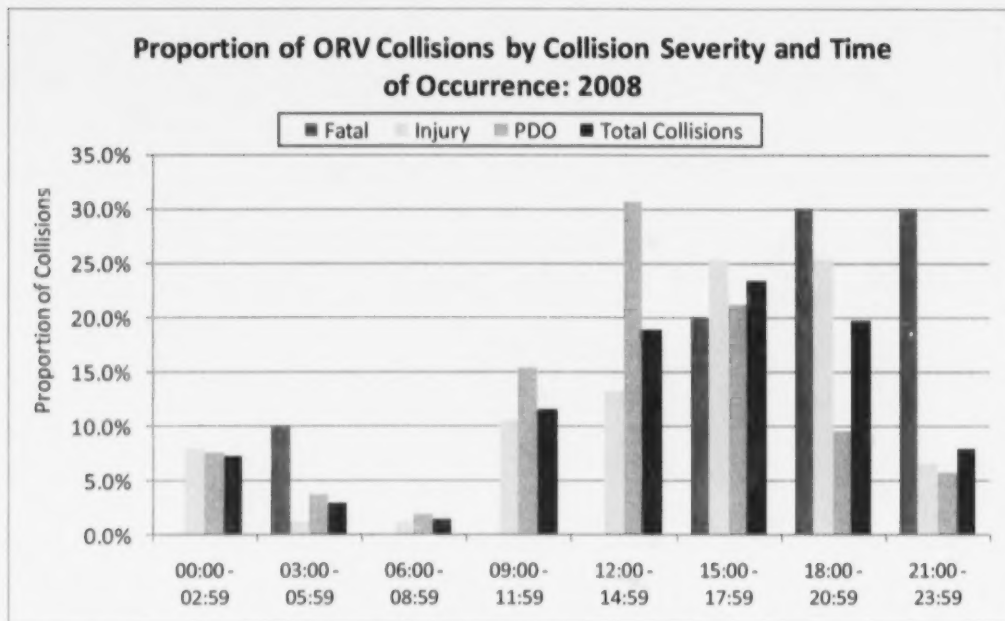
Time	Collision Severity						2008 Total	% of 2008 Total	2003-07 Average	% Change 2008 to 2003-07 Average
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO				
00:00 - 02:59	0	-	6	8.0%	4	7.7%	10	7.3%	9	62.8%
03:00 - 05:59	1	10.0%	1	1.3%	2	3.8%	4	2.9%		
06:00 - 08:59	0	-	1	1.3%	1	1.9%	2	1.5%	17	4.7%
09:00 - 11:59	0	-	8	10.7%	8	15.4%	16	11.7%		
12:00 - 14:59	0	-	10	13.3%	16	30.8%	26	19.0%	66	-12.4%
15:00 - 17:59	2	20.0%	19	25.3%	11	21.2%	32	23.4%		
18:00 - 20:59	3	30.0%	19	25.3%	5	9.6%	27	19.7%	47	-18.5%
21:00 - 23:59	3	30.0%	5	6.7%	3	5.8%	11	8.0%		
Not Stated	1	10.0%	6	8.0%	2	3.8%	9	6.6%	8	15.4%
Total	10	100%	75	100%	52	100%	137	100%	146	-6.4%

The majority of off-road collisions occur during the afternoon and early evening. In 2008, four in ten ORV vehicle collisions occurred between noon and 6 p.m. (12:00 to 14:59 – 19%; 15:00 to 17:59 – 23%), and another two in ten occurred between 6 p.m. and 9 p.m. (18:00 to 20:59 – 20%)

Compared to the previous five years (2003 to 2007) on average, there were fewer afternoon and evening ORV collisions and more early morning ORV collisions in 2008.

- Afternoon (12:00 to 17:59) – 58 in 2008; 66 average in previous five years.
- Evening (18:00 to 23:59) – 38 in 2008; 47 average in previous five years.
- Early morning (00:00 to 05:59) – 14 in 2008; 9 average in previous five years.

NOTE: The methodology for counting collisions by time of occurrence was changed in 2008. The new methodology uses three-hour rather than six-hour time periods. Historical data (2003 to 2007) is presented using the six-hour time periods.

Figure 11-5 Proportion of Total ORV Collisions by Collision Severity and Time of Occurrence

Beginning at noon and progressing to midnight, the severity of ORV collisions increases as time goes by. In 2008, the three-hour time periods between noon and midnight account for most ORV collisions. The highest proportions of fatal ORV collisions occur between 6 p.m. and midnight. Injury collisions have their highest proportions between 3 p.m. and 9 p.m. PDO collisions involving ORVs have their highest proportions between noon and 6 pm.

Table 11-8 Off-Road Vehicle Collisions by Light Condition and Collision Severity

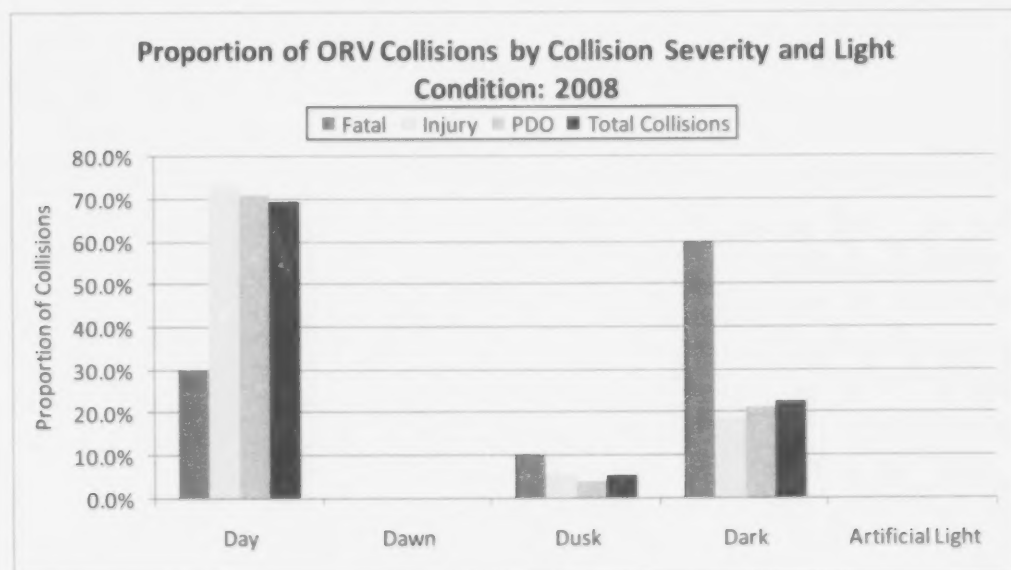
Table 11-8
 ORV Collisions by Light Condition and Collision Severity: 2008, 2005-2007 Average

Light Condition	Collision Severity						2008 Total	% of 2008 Total	2005-07 Average	% Change 2008 to 2005-07 Average
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO				
Day	3	30.0%	55	73.3%	37	71.2%	95	69.3%	96	-1.0%
Dawn	0	-	0	-	0	-	0	-	2	-100.0%
Dusk	1	10.0%	4	5.3%	2	3.8%	7	5.1%	10	-32.3%
Dark	6	60.0%	14	18.7%	11	21.2%	31	22.6%	46	-32.1%
Artificial Light	0	-	0	-	0	-	0	-	2	-100.0%
Not Stated	0	-	2	2.7%	2	3.8%	4	2.9%	1	300.0%
Total	10	100%	75	100%	52	100%	137	100%	157	-12.6%

The majority of ORV collisions occur during daylight conditions, from a half hour after sunrise to a half hour before sunset. In 2008, these accounted for 95 collisions (69% of the total). An additional 31 collisions (23%) occurred during darkness. Seven collisions (5%) occurred during dusk. No collisions occurred in 2008 during dawn or in artificial lighting conditions.

Compared to the previous five years (2003 to 2007) on average, there was a substantial drop in 2008 in terms of the number of ORV collisions occurring during darkness (31 in 2008 compared to 46 in 2005-2007, a 32% decline).

NOTE: 'Light Condition' has only been compiled for ORV collisions since 2005. Historical averages are presented for the three-year period between 2005 and 2007 only.

Figure 11-6 Proportion of ORV Collisions by Collision Severity and Light Condition

In 2008, the highest proportion of fatal ORV collisions occurred in the dark while the highest proportion of

Table 11-9 ORV Collisions by Weather Condition and Collision Severity

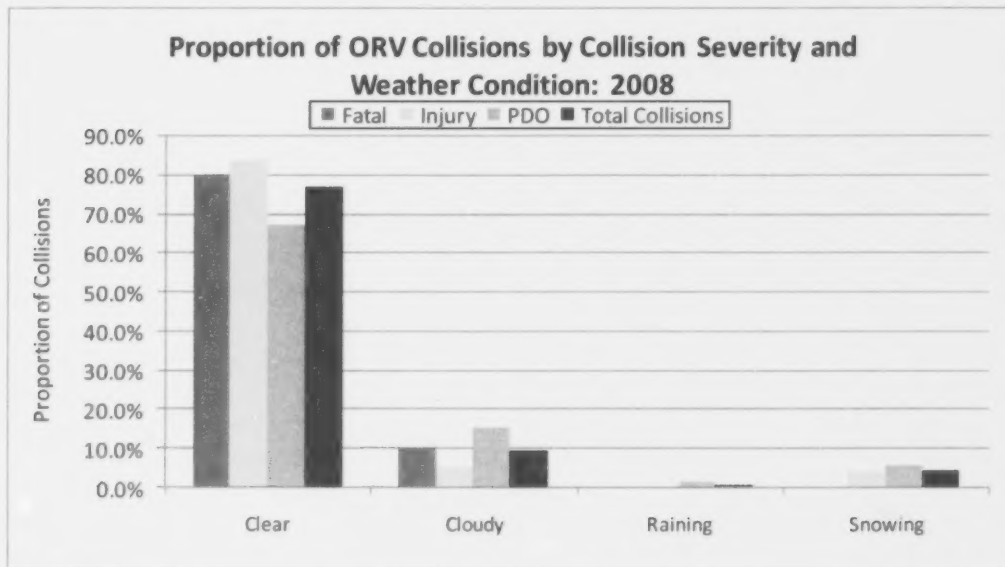
Table 11-9
 ORV Collisions by Weather Condition and Collision Severity: 2008, 2005-2007 Average

Weather Condition	Collision Severity						2008 Total	% of 2008 Total	2005-07 Average	% Change 2008 to 2005-07 Average
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO				
Clear	8	80.0%	63	84.0%	35	67.3%	106	77.4%	112	-5.6%
Cloudy	1	10.0%	4	5.3%	8	15.4%	13	9.5%	25	-48.7%
Raining	0	-	0	-	1	1.9%	1	0.7%	4	-76.9%
Snowing	0	-	3	4.0%	3	5.8%	6	4.4%	5	28.6%
Fog/Mist	0	-	0	-	0	-	0	-	2	-100.0%
Smoke/Dust	0	-	0	-	0	-	0	-	0	-
Drifting Snow	0	-	0	-	0	-	0	-	2	-100.0%
Strong Winds	1	10.0%	3	4.0%	2	3.8%	6	4.4%	0	1700.0%
Not Stated	0	-	2	2.7%	3	5.8%	5	3.6%	5	7.1%
Total	10	100%	75	97%	52	94%	137	96%	157	-12.6%

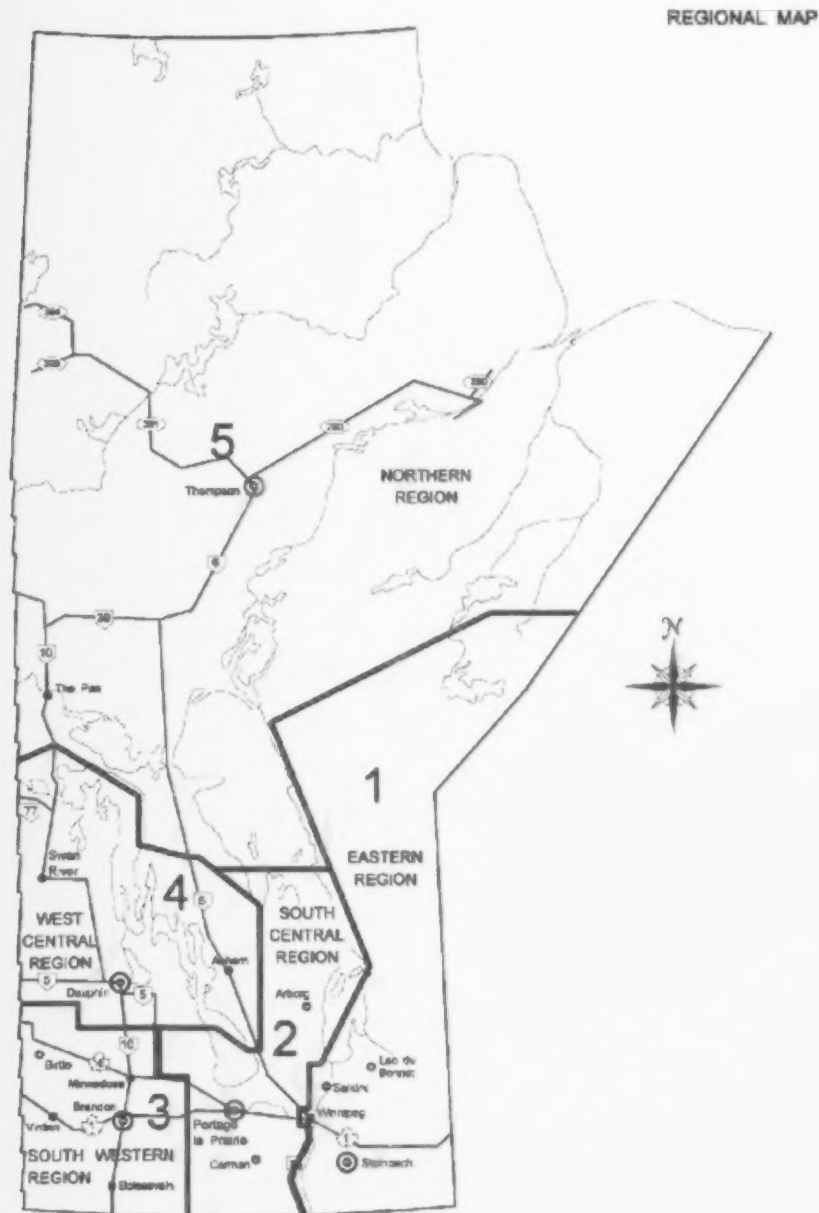
The largest proportion of off-road vehicle collisions occur when weather conditions are clear. In 2008, 106 collisions (77% of the total) occurred in clear weather conditions. Another 13 collisions (10%) occurred in cloudy weather. Six collisions (4%) occurred in snowing weather or strong winds, each.

Compared to the previous three year period (2005 to 2007) on average, collisions in clear conditions were down slightly in 2008 (106 compared to an average of 112), and collisions in cloudy weather decreased substantially (13 compared to an average of 25). Notably, no collisions were recorded in strong winds in the previous three years, but 6 were recorded in 2008.

NOTE: 'Weather Condition' has only been compiled for ORV collisions since 2005. Historical averages are presented for the three-year period between 2005 and 2007 only.

Figure 11-7 Proportion of ORV Collisions by Collision Severity and Weather Condition

In 2008, very little difference can be seen in the proportion of ORV collisions of different severity and the weather conditions in which they occur.

Map 1-1 Manitoba Infrastructure and Transportation (MIT) Regions

Source: Manitoba Infrastructure and Transportation, Traffic Engineering

This map shows the boundaries of Manitoba Infrastructure and Transportation (MIT) regions and regional office locations. Regional Offices are responsible for service delivery and management of MIT programs, as indicated in the department's annual report¹. Off-road vehicle collisions are reported by location within these regions.

¹ 2007/2008 Annual Report for Manitoba Infrastructure and Transportation.

Table 11-10 ORV Collisions by MIT Region and Collision Severity

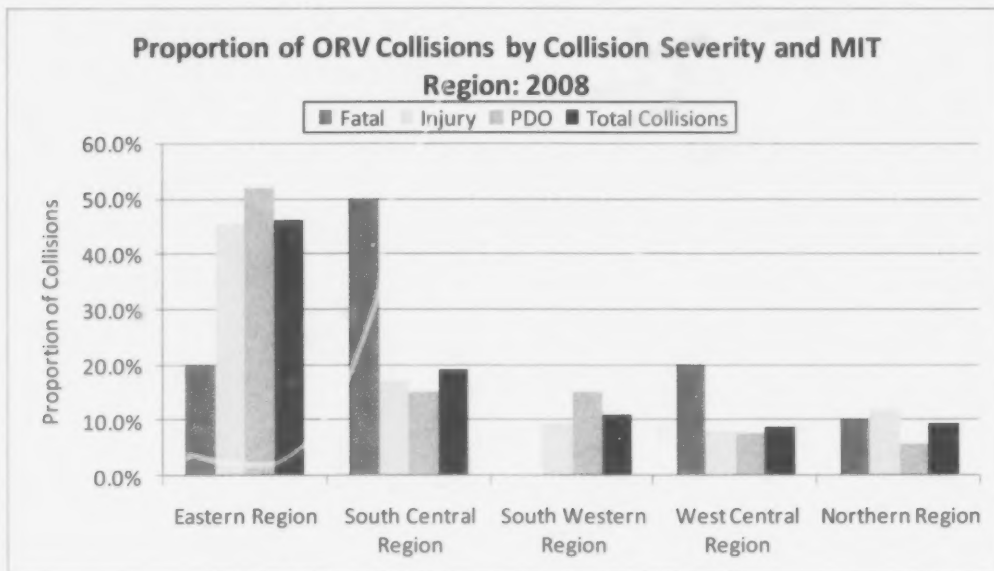
Table 11-10
ORV Collisions by MIT Region and Collision Severity: 2008, 2005-2007 Average

Region	Collision Severity						2008 Total	% of 2008 Total	2005-07 Average	% Change 2008 to 2005-07 Average
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO				
Eastern Region	2	20.0%	34	45.3%	27	51.9%	63	46.0%	67	-5.5%
South Central Region	5	50.0%	13	17.3%	8	15.4%	26	19.0%	23	14.7%
South Western Region	0	-	7	9.3%	8	15.4%	15	10.9%	22	-31.8%
West Central Region	2	20.0%	6	8.0%	4	7.7%	12	8.8%	11	5.9%
Northern Region	1	10.0%	9	12.0%	3	5.8%	13	9.5%	32	-59.4%
Not Stated	0	-	6	8.0%	2	3.8%	8	5.8%	2	300.0%
Total	10	100%	75	100%	52	100%	137	100%	157	-12.6%

The Eastern Region of Manitoba historically accounts for the largest share of off-road vehicle accidents. In 2008, 63 collisions (46% of the total, slightly ahead of the average in 2005-07 of 43%) occurred in the Eastern Region. The South Central Region followed with 26 collisions (19%), while the South Western Region had 15 collisions (11%).

Compared with recent history (2005-07), the number of South Central Region collisions were above average (26 collisions in 2008 compared to an average of 23 in previous 3 years on average), while the number of Northern Region collisions were down substantially (13 collisions compared to 32 per year on average). South Western Region collisions were also below average (15 compared to an average of 22).

NOTE: 'MIT Region' has only been compiled for ORV collisions since 2005. Historical averages are presented for the three-year period between 2005 and 2007 only.

Figure 11-8 Proportion of ORV Collisions by Collision Severity and MIT Region

In 2008, the South Central Region accounted for the highest proportion of fatal ORV collisions while the Eastern Region accounted for the highest proportions of injury and PDO collisions involving ORVs.

Table 11-11 Off-Road Vehicle Collisions by Location and Collision Severity

Table 11-11
 ORV Collisions by Location and Collision Severity: 2008, 2003-2007 Average

Location	Collision Severity						2008 Total	% of 2008 Total	2003-07 Average	% Change 2008 to 2003-07 Average
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO				
Public Roadway	3	30%	19	25%	5	10%	27	20%	43	-36.9%
Ditches	3	30%	17	23%	10	19%	30	22%	22	36.4%
River/Lake	0	-	11	15%	8	15%	19	14%	9	120.9%
Field	0	-	4	5%	8	15%	12	9%	21	-42.9%
Bush Trails/Winter Road	0	-	2	3%	1	2%	3	2%	7	-58.3%
Farm Yard/Private Property	0	-	5	7%	2	4%	7	5%	15	-52.1%
Marked/Groom Trails	1	10%	6	8%	10	19%	17	12%	19	-8.6%
Parking Lot	0	-	0	-	1	2%	1	1%	5	-80.0%
Unmarked trail/hill	0	-	0	-	1	2%	1	1%	0	150.0%
Trail	0	-	2	3%	2	4%	4	3%	0	-
Embankment	1	10%	0	-	0	-	1	1%	0	-
Gravel Road	1	10%	1	1%	0	-	2	1%	0	-
Other	0	-	0	-	0	-	0	-	3	-100.0%
Not Stated	1	10%	8	11%	4	8%	13	9%	3	333.3%
Total	10	100%	75	100%	52	100%	137	100%	146	-6.4%

In 2008, the most common location for off-road vehicle collisions were in ditches (30 collisions or 22%) followed by public roadways (27 collisions or 20%). Each of those locations also accounted for 3 fatalities, together accounting for 60% of fatal ORV collisions. Collisions on rivers or lakes (i.e., while frozen) accounted for 19 collisions (14%) and groomed or marked trails accounted for 17 collisions (12%).

Compared to the previous five year period (2003 to 2007) on average, collisions on public roadways decreased substantially (27 in 2008 compared to 43 in the previous five years on average), while collisions in ditches (30 compared to 22) and on rivers/lakes (19 compared to 9) increased.

NOTE: For a detailed historical count of ORV collisions by location in each year from 2003 to 2008, please refer to "Table 11-20 Historical Summary of ORV Collisions by Location: 2003 to 2008" at the end of this section.

Table 11-12 ORV Collision Victims by Age Group and Casualty Type

Table 11-12
ORV Collision Victims by Age Group and Casualty Type: 2008, 2003-2007 Average

Age Group	2008 Casualty Type						2003-07 Average			
	Killed	% of Total Killed	Injured	% of Total Injured	2008 Total Victims	% of 2008 Total Victims	Killed	Injured	Total Victims	% of Total Victims
0-4	0	-	0	-	0	-	0	1	1	0.7%
5-9	0	-	5	5.3%	5	4.7%	0	3	3	2.7%
10-14	0	-	12	12.6%	12	11.3%	0	13	13	10.6%
15-19	2	18.2%	21	22.1%	23	21.7%	2	23	26	21.6%
20-24	2	18.2%	9	9.5%	11	10.4%	1	15	16	13.3%
25-34	0	-	16	16.8%	16	15.1%	2	19	21	17.6%
35-44	3	27.3%	14	14.7%	17	16.0%	1	18	20	16.6%
45-54	2	18.2%	7	7.4%	9	8.5%	0	11	11	9.6%
55-64	2	18.2%	3	3.2%	5	4.7%	0	4	4	3.7%
65+	0	-	2	2.1%	2	1.9%	0	1	1	1.2%
Not Stated	0	-	6	6.3%	6	5.7%	0	3	3	2.4%
Total	11	100%	95	100%	106	100%	8	111	118	100%

In 2008, nearly half of ORV collision victims were between the ages of 5 and 24 (51 victims, 48% of the total), with the highest proportion coming from the 15 to 19 year old age group (22% of all ORV victims). Those aged 15 to 24 account for 4 of the 11 victims killed in ORV collisions in 2008. The number of victims killed in this age group (4 in 2008) is relatively equal to the number killed in this age group in the previous five years (2003 to 2007) on average (3).

NOTE: The classification of victims differs from that of drivers (see Table 11-16) as victims may be any age. Therefore, they are classified by 5-year age cohort up to age 24. While drivers of off-road vehicles may not be required to be licensed as for public roadway vehicles, driver statistics are recorded consistent with other sections, and identified as under 16, 16-19, and then using the same classifications for victims.

NOTE: For a detailed historical count of ORV collision victims by age group in each year from 2003 to 2008, please refer to "Table 11-21 Historical Summary of ORV Collision Victims by Age Group: 2003 to 2008" at the end of this section.

Table 11-13 ORV Collision Victims by Gender and Casualty Type

Table 11-13
ORV Collision Victims by Gender and Casualty Type: 2008, 2003-2007 Average

Gender	2008 Casualty Type						2003-07 Average			
	Killed	% of Total Killed	Injured	% of Total Injured	2008 Total Victims	% of 2008 Total Victims	Killed	Injured	Total Victims	% of Total Victims
Male	9	81.8%	69	72.6%	78	73.6%	6	85	92	77.5%
Female	2	18.2%	26	27.4%	28	26.4%	1	25	27	22.5%
Total	11	100%	95	100%	106	100%	8	111	118	100%

The majority of ORV collision victims, and particularly victims killed, are male. In 2008, males account for 78 of 106 of ORV collision victims (74% of all victims), including 9 of 11 fatalities (82%) and 69 of 95 injuries (73%). Compared to the previous five year period (2003 to 2007) on average, the number of male victims is down in 2008 (78 compared to 92 on average).

Table 11-14 ORV Collision Victims by Safety Equipment and Casualty Type 2008

Table 11-14
ORV Collision Victims by Safety Equipment Use and Casualty Type: 2008, 2003-2007 Average

Safety Equipment	2008 Casualty Type						2003-07 Average				% Change 2008 to 2003-07 Average
	Killed	% of Total Killed	Injured	% of Total Injured	2008 Total Victims	% of 2008 Total Victims	Killed	Injured	Total Victims	% of Total Victims	
Safety Helmet Worn	4	36.4%	42	44.2%	46	43.4%	3	50	52	44.3%	-12.2%
Safety Helmet Not Worn	4	36.4%	17	17.9%	21	19.8%	4	26	30	25.3%	-30.0%
Not Stated	1	9.1%	25	26.3%	26	24.5%	1	25	26	21.6%	1.6%
Not Applicable*	2	18.2%	11	11.6%	13	12.3%	1	10	10	8.8%	25.0%
Total	11	100%	95	100%	106	100%	8	111	118	100%	-10.5%

* Victims who were not operators/passengers of off-road vehicles

In 2008, 46 victims in ORV collisions were wearing a safety helmet; 21 were not. This includes 4 victims killed while wearing a helmet and 4 victims killed while not wearing a helmet. Compared to the previous five years (2003 to 2007) on average, the proportion of victims injured and killed who were wearing a helmet and not wearing a helmet has remained relatively consistent in 2008.

Table 11-15 ORV Victims Killed vs. Injured for Helmeted and Non-helmeted ORV Occupants

Table 11-15

ORV Victims Killed vs. Injured for Helmeted and Non-helmeted ORV Occupants (2003-2008)

	Helmet worn		Helmet not worn		Helmet Effectiveness
	Number	Percent	Number	Percent	(Ratio of % helmet not worn to % helmet worn)
Fatal	17	5.5%	23	13.5%	2.44
Injury	291	94.5%	148	86.5%	0.92
Total	308	100%	171	100%	-

As the number of victims wearing helmets exceeds the number of those not wearing helmets, a casual interpretation of the statistics may lead one to conclude helmets contribute to fatalities and injuries in ORV collisions. However, it is plausible that a large majority of total drivers and passengers are wearing helmets, and thus have a high representation among collision victims. Unfortunately, data does not readily exist to measure helmet usage among ORV drivers and passengers, so this cannot be directly confirmed.

The above table instead compares the proportion of victims killed and injured for those wearing and not wearing helmets. Among those wearing helmets when they sustain an injury from an ORV collision, 5.5% of victims are killed. Among victims from an ORV collision who were not wearing a helmet, 13.5% of victims are killed. This indicates that a collision victim is over 2.4 times more likely to be killed if they are not wearing a helmet at the time of an ORV collision.

Table 11-16 Drivers Involved in ORV Collisions by Age Group and Collision Severity

Table 11-16

Drivers Involved in ORV Collisions by Age Group and Collision Severity: 2008, 2003-2007 Average

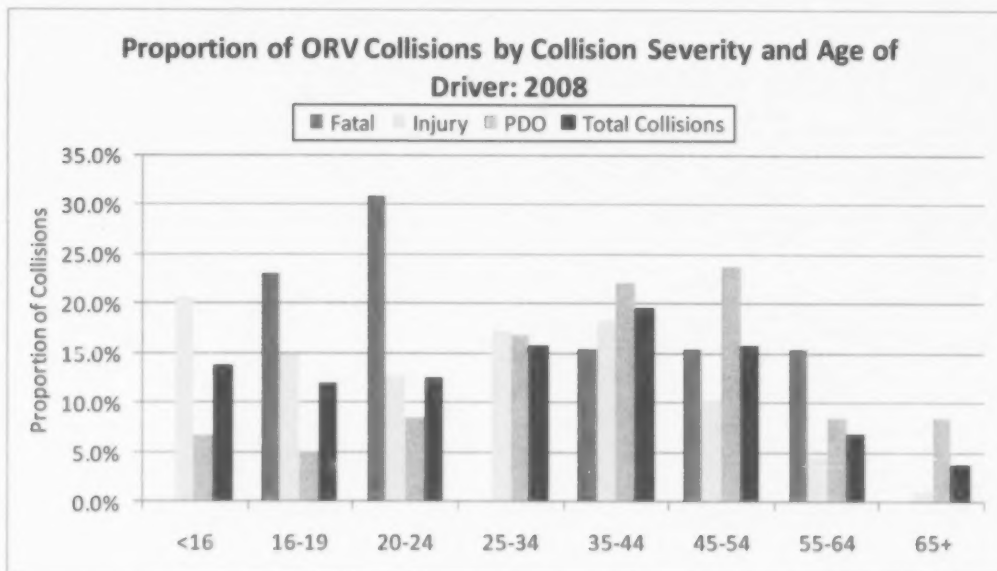
Age Group	Collision Severity						2008 Total	% of 2008 Total*	2003-07 Average	% Change 2008 to 2003-07 Average
	Fatal	% of Total Fatal*	Injury	% of Total Injury*	PDO	% of Total PDO*				
<16	0	-	18	20.7%	4	6.8%	22	13.8%	22	-0.9%
16-19	3	23.1%	13	14.9%	3	5.1%	19	11.9%	25	-22.8%
20-24	4	30.8%	11	12.6%	5	8.5%	20	12.6%	23	-14.5%
25-34	0	-	15	17.2%	10	16.9%	25	15.7%	38	-34.9%
35-44	2	15.4%	16	18.4%	13	22.0%	31	19.5%	34	-7.7%
45-54	2	15.4%	9	10.3%	14	23.7%	25	15.7%	24	4.2%
55-64	2	15.4%	4	4.6%	5	8.5%	11	6.9%	8	37.5%
65+	0	-	1	1.1%	5	8.5%	6	3.8%	3	76.5%
Not Stated	0	-	2	-	5	-	7	-	11	-
Total	13	100%	89	100%	64	100%	166	100%	189	-12.1%

*Percentage of the total does not include the "not stated" category.

In 2008, drivers aged 35 to 44 account for the highest proportion of ORV collisions (31 collisions, 20% of the total), followed by drivers aged 25 to 34 and 45 to 54 (each at 25 collisions or 16%). Overall, drivers aged 25 to 54 account for just over half (51%) of all ORV collisions. Drivers under 25 years of age account for 38% of ORV collisions, but a disproportionately high number of those were involved in fatal collisions (54%) and injury collisions (48%). Drivers aged 55 and older account for 11% of all collisions and 15% of fatal collisions, but only 6% of injury collisions.

In the previous five years (2003 to 2007) on average, drivers aged 25 to 34 accounted for 20% of all ORV collisions, higher than the proportion they account for in 2008.

Figure 11-9 Distribution of Total Driver Involvement in Off-Road Vehicle Collisions by Age Group 2008



In 2008, drivers aged 16 to 19 and those aged 20 to 24 account for the highest proportions of fatal ORV collisions. Drivers under the age of 16 account for the highest proportion of injury ORV collisions.

Drivers aged 45 to 54 and those aged 55 to 64 account for higher proportions of fatal ORV collisions than of injury ORV collisions.

Drivers age 25 to 54, combined, account for the vast majority of PDO collisions involving ORVs.

Table 11-17 ORV Collisions by Contributing Factors and Collision Severity

Table 11-17

ORV Collisions by Contributing Factors and Collision Severity: 2008

Contributing Factor	2008 Collision Severity						2008 Total Victims	% of 2008 Total Victims
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Driver Action - Driving Properly & Human Condition - Apparently Normal	2	15.4%	27	30.3%	32	50.0%	61	36.7%
Driver Action - Driving properly	0	-	2	2.2%	3	4.7%	5	3.0%
Any At-fault Driver Action	10	76.9%	57	64.0%	26	40.6%	93	56.0%
Following too closely	0	-	3	3.4%	0	-	3	1.8%
Turning improperly	0	-	1	1.1%	0	-	1	0.6%
Exceeding speed limit	2	15.4%	2	2.2%	2	3.1%	6	3.6%
Driving too fast for conditions	0	-	13	14.6%	2	3.1%	15	9.0%
Unsafe operating speed (Too fast or too slow)	3	23.1%	6	6.7%	3	4.7%	12	7.2%
Fail to yield right of way	1	7.7%	1	1.1%	2	3.1%	4	2.4%
Disobey traffic control device/officer	0	-	1	1.1%	0	-	1	0.6%
Drive wrong way on roadway	1	7.7%	0	-	0	-	1	0.6%
Back unsafely	0	-	0	-	1	1.6%	1	0.6%
Careless Driving	1	7.7%	12	13.5%	8	12.5%	21	12.7%
Lost control/Drive off road	3	23.1%	12	13.5%	5	7.8%	20	12.0%
Driverless vehicle ran out of control	0	-	0	-	1	1.6%	1	0.6%
Driver inexperience	0	-	6	6.7%	2	3.1%	8	4.8%
Human Condition - Apparently Normal	3	23.1%	46	51.7%	21	32.8%	70	42.2%
Any At-fault Human Condition	8	61.5%	12	13.5%	7	10.9%	27	16.3%
Medical disability	0	-	0	-	1	1.6%	1	0.6%
Mental confusion/Inability to remember	0	-	3	3.4%	0	-	3	1.8%
Ability impaired alcohol	5	38.5%	2	2.2%	0	-	7	4.2%
Ability impaired drugs	1	7.7%	0	-	0	-	1	0.6%
Had been drinking/Suspected alcohol use	2	15.4%	2	2.2%	0	-	4	2.4%
Distraction/Inattention	1	7.7%	5	5.6%	6	9.4%	12	7.2%
No apparent (vehicle) defect	9	69.2%	60	67.4%	33	51.6%	102	61.4%
Any At-fault Vehicle Defect	0	-	3	3.4%	7	10.9%	10	6.0%
Defective brakes	0	-	0	-	1	1.6%	1	0.6%
Defective engine controls/drive train	0	-	1	1.1%	3	4.7%	4	2.4%
Defective suspension/wheels	0	-	1	1.1%	0	-	1	0.6%
Defective tires	0	-	0	-	0	-	0	-
Vehicle modifications	0	-	1	1.1%	0	-	1	0.6%
Fire	0	-	0	-	3	4.7%	3	1.8%

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Contributing Factor	2008 Collision Severity						2008 Total Victims	% of 2008 Total Victims
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Any At-fault Environmental Condition	0	-	24	27.0%	22	34.4%	46	27.7%
Animal action - Wild	0	-	1	1.1%	1	1.6%	2	1.2%
Slippery road surface	0	-	5	5.6%	2	3.1%	7	4.2%
Snow drift	0	-	6	6.7%	6	9.4%	12	7.2%
Obstruction/debris on roadway	0	-	8	9.0%	8	12.5%	16	9.6%
Glare/reflection	0	-	1	1.1%	0	-	1	0.6%
Defective driving surface	0	-	1	1.1%	4	6.3%	5	3.0%
Weather	0	-	2	2.2%	0	-	2	1.2%
Presence of prior accident	0	-	0	-	1	1.6%	1	0.6%
No contributing factor(s) identified	0	-	3	3.4%	3	4.7%	6	3.6%
Total	13	100%	89	100%	64	100%	166	100%

*NOTE: For each vehicle and/or driver involved in a collision, police can record up to three contributing factors. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

In 2008, at-fault contributing factors were recorded for 81% of the drivers and vehicles involved in ORV collisions, including:

- 10 of 13 drivers and vehicles involved in fatal collisions (77%);
- 73 drivers and vehicles involved in injury collisions (82%); and,
- 51 drivers and vehicles involved in PDO collisions (80%).

At-fault 'Driver Action' factors were recorded for 56% of the drivers and vehicles involved in ORV collisions. The most prevalent of these include:

- 'Careless driving' – 13% of the drivers and vehicles involved;
- 'Lost control' – 12% of the drivers and vehicles involved;
- 'Driving too fast for conditions' – 9% of the drivers and vehicles involved;
- 'Unsafe operating speed' – 7% of the drivers and vehicles involved; and,
- 'Exceeding speed limit' – 4% of the drivers and vehicles involved.

At-fault 'Human Condition' factors were recorded for 16% of the drivers and vehicles involved in ORV collisions. The most prevalent of these include:

- 'Distraction/Inattention' – 7% of the drivers and vehicles involved; and,
- 'Ability impaired by alcohol' – 4% of the drivers and vehicles involved.

'Environmental Conditions' were recorded as contributing to 28% of the drivers and vehicles involved in ORV collisions, with the most common being 'obstruction/debris on roadway' (10%) and 'snow drift' (7%).

Only 6% of the drivers and vehicles involved in ORV collisions had a 'Vehicle Defect' recorded as a contributing factor.

In the previous five years (2003 to 2007) on average, of the drivers and vehicles involved in ORV collisions:

- 49% had an at-fault 'Driver Action' recorded, with the most common being 'Drive too fast for conditions' and 'Careless driving' (10% each), and 'Lost control' (8%);
- 15% had an at-fault 'Human Condition' recorded, with the most common being 'Ability impaired by alcohol', 'Had been drinking/Suspected alcohol use' and 'Distraction/Inattention' (5% each);
- 32% had an 'Environmental Condition' recorded, with the most common being 'Defective driving surface' (9%); and,
- 5% had a 'Vehicle Defect' recorded as a contributing factor.

Fatal ORV collisions in 2008 are very likely to have either an at-fault 'Driver Action' or 'Human Condition' recorded as a contributing factor; 10 of 13 fatal collisions (77%) had an at-fault 'Driver Action' and 8 of 13 (62%) had an at-fault 'Human Condition'. The most common at-fault contributing factors in fatal ORV collisions included:

- 'Ability impaired by alcohol' – 5 fatal collisions (39%);
- 'Unsafe operating speed' and 'Lost control' – 3 fatal collisions (23%), each;
- 'Had been drinking/Suspected alcohol use' and 'Exceeding speed limit' – 2 fatal collisions (15%), each.

NOTE: For a detailed historical count of ORV collisions by the contributing factors recorded in each year from 2003 to 2008, please refer to "Table 11-22 Historical Summary of ORV Collisions by Contributing Factors: 2003 to 2008" at the end of this section.

Table 11-18 Historical Summary of ORVs Involved in Collisions by Vehicle Type and Active Registration

Table 11-18

Historical Summary of ORVs Involved in Collisions by Vehicle Type and Active Registration: 2005 to 2008

Vehicle Type	2005		2006		2007		2008	
	Active Registrations Involved	% Known to be Registered**	Active Registrations Involved	% Known to be Registered**	Active Registrations Involved	% Known to be Registered**	Active Registrations Involved	% Known to be Registered**
Snowmobile	97	70%	123	71%	94	76%	59	80%
ATV	64	58%	53	60%	37	54%	29	57%
Motorcycle	12	33%	10	20%	6	17%	2	29%
Other*	33	82%	42	86%	37	84%	28	82%
Total	206	66.0%	228	68.9%	174	70.7%	118	71.1%

* 'Other' includes: vehicles not registered as an off-road vehicle, dune /sport buggy, 4 wheel drive motor vehicle (operated off-road), amphibious vehicle, and those listed under "not stated" category.

** The "% known to be registered" is calculated as active registrations as a proportion of total ORVs in the category.

Table 11-19 Historical Summary of ORV Collisions by Month of Occurrence

Table 11-19
 Historical Summary of ORV Collisions by Month of Occurrence: 2003 to 2008

Month	2003 Total	% of 2003 Total	2004 Total	% of 2004 Total	2005 Total	% of 2005 Total	2006 Total	% of 2006 Total	2007 Total	% of 2007 Total	2008 Total	% of 2008 Total
January	15	12.2%	23	16.5%	16	9.9%	15	8.5%	27	20.5%	20	14.6%
February	22	17.9%	22	15.8%	26	16.0%	26	14.8%	17	12.9%	24	17.5%
March	15	12.2%	11	7.9%	26	16.0%	38	21.6%	17	12.9%	18	13.1%
April	9	7.3%	7	5.0%	9	5.6%	9	5.1%	9	6.8%	2	1.5%
May	6	4.9%	15	10.8%	14	8.6%	6	3.4%	4	3.0%	15	10.9%
June	6	4.9%	7	5.0%	11	6.8%	15	8.5%	4	3.0%	9	6.6%
July	9	7.3%	16	11.5%	9	5.6%	12	6.8%	2	1.5%	10	7.3%
August	8	6.5%	6	4.3%	14	8.6%	10	5.7%	7	5.3%	12	8.8%
September	8	6.5%	4	2.9%	7	4.3%	11	6.3%	6	4.5%	3	2.2%
October	6	4.9%	5	3.6%	10	6.2%	4	2.3%	7	5.3%	3	2.2%
November	4	3.3%	6	4.3%	3	1.9%	1	0.6%	5	3.8%	5	3.6%
December	15	12.2%	17	12.2%	17	10.5%	29	16.5%	27	20.5%	16	11.7%
Total	123	100%	139	100%	162	100%	176	100%	132	100%	137	100%

Table 11-20 Historical Summary of ORV Collisions by Location

Table 11-20
 Historical Summary of ORV Collisions by Location: 2003 to 2008

Location	2003 Total	% of 2003 Total	2004 Total	% of 2004 Total	2005 Total	% of 2005 Total	2006 Total	% of 2006 Total	2007 Total	% of 2007 Total	2008 Total	% of 2008 Total
Public Roadway	35	28.5%	42	30.2%	50	30.9%	60	34.1%	27	20.5%	27	19.7%
Ditches	15	12.2%	21	15.1%	21	13.0%	30	17.0%	23	17.4%	30	21.9%
River/Lake	12	9.8%	8	5.8%	7	4.3%	7	4.0%	9	6.8%	19	13.9%
Field	14	11.4%	27	19.4%	23	14.2%	32	18.2%	9	6.8%	12	8.8%
Bush Trails/Winter Road	6	4.9%	8	5.8%	5	3.1%	9	5.1%	8	6.1%	3	2.2%
Farm Yard/Private Property	14	11.4%	17	12.2%	15	9.3%	10	5.7%	17	12.9%	7	5.1%
Marked/Groom Trails	18	14.6%	9	6.5%	27	16.7%	16	9.1%	23	17.4%	17	12.4%
Parking Lot	2	1.6%	5	3.6%	7	4.3%	5	2.8%	6	4.5%	1	0.7%
Unmarked trail/hill	0	-	0	-	0	-	0	-	2	1.5%	1	0.7%
Trail	0	-	0	-	0	-	0	-	0	-	4	2.9%
Embankment	0	-	0	-	0	-	0	-	0	-	1	0.7%
Gravel Road	0	-	0	-	0	-	0	-	0	-	2	1.5%
Other	4	3.3%	1	0.7%	4	2.5%	3	1.7%	4	3.0%	0	-
Not Stated	3	2.4%	1	0.7%	3	1.9%	4	2.3%	4	3.0%	13	9.5%
Total	123	100%	139	100%	162	100%	176	100%	132	100%	137	100%

Table 11-21 Historical Summary of ORV Collision Victims by Age Group

Table 11-21
 Historical Summary of ORV Collision Victims by Age Group: 2003 to 2008

Age Group	2003 Total	% of 2003 Total	2004 Total	% of 2004 Total	2005 Total	% of 2005 Total	2006 Total	% of 2006 Total	2007 Total	% of 2007 Total	2008 Total	% of 2008 Total
0-4	0	-	2	1.9%	0	-	0	-	2	1.9%	0	-
5-9	2	1.8%	3	2.8%	3	2.3%	5	3.5%	3	2.9%	5	4.7%
10-14	9	8.3%	7	6.5%	12	9.2%	20	14.1%	15	14.6%	12	11.3%
15-19	16	14.7%	23	21.5%	36	27.5%	37	26.1%	16	15.5%	23	21.7%
20-24	15	13.8%	16	15.0%	15	11.5%	24	16.9%	9	8.7%	11	10.4%
25-34	25	22.9%	19	17.8%	19	14.5%	17	12.0%	24	23.3%	16	15.1%
35-44	17	15.6%	21	19.6%	25	19.1%	20	14.1%	15	14.6%	17	16.0%
45-54	16	14.7%	7	6.5%	11	8.4%	11	7.7%	12	11.7%	9	8.5%
55-64	4	3.7%	3	2.8%	7	5.3%	5	3.5%	3	2.9%	5	4.7%
65+	2	1.8%	3	2.8%	1	0.8%	0	-	1	1.0%	2	1.9%
Not Stated	3	2.8%	3	2.8%	2	1.5%	3	2.1%	3	2.9%	6	5.7%
Total	109	100%	107	100%	131	100%	142	100%	103	100%	106	100%

Section 11

Off-Road Vehicle Collisions

Table 11-22 Historical Summary of ORV Collisions by Contributing Factors

Table 11-22
Historical Summary of ORV Collisions by Contributing Factors: 2003 to 2008

Contributing Factor	2003 Total	% of 2003 Total	2004 Total	% of 2004 Total	2005 Total	% of 2005 Total	2006 Total	% of 2006 Total	2007 Total	% of 2007 Total	2008 Total	% of 2008 Total
Drive Properly	73	49.3%	88	46.8%	97	47.1%	100	43.9%	72	41.4%	66	39.8%
Follow Too Closely	1	0.7%	2	1.1%	1	0.5%	2	0.9%	4	2.3%	3	1.8%
Turn Improperly	2	1.4%	4	2.1%	2	1.0%	0	-	1	0.6%	1	0.6%
Exceed Speed Limit	0	-	1	0.5%	1	0.5%	3	1.3%	5	2.9%	6	3.6%
Drive Too Fast for Conditions	9	6.1%	13	6.9%	23	11.2%	23	10.1%	23	13.2%	15	9.0%
Unsafe Operating Speed	6	4.1%	13	6.9%	10	4.9%	17	7.5%	4	2.3%	12	7.2%
Failed to Yield Right of Way	2	1.4%	6	3.2%	3	1.5%	4	1.8%	7	4.0%	4	2.4%
Disobeyed Traffic Control Device	1	0.7%	3	1.6%	3	1.5%	1	0.4%	2	1.1%	1	0.6%
Driving Wrong Way on Roadway	3	2.0%	0	-	3	1.5%	2	0.9%	2	1.1%	1	0.6%
Backing Unsafely	1	0.7%	2	1.1%	1	0.5%	0	-	0	-	1	0.6%
Careless Driving	11	7.4%	23	12.2%	18	8.7%	32	14.0%	12	6.9%	21	12.7%
Lost Control /Drive Off-Road	16	10.8%	13	6.9%	12	5.8%	16	7.0%	14	8.0%	20	12.0%
Driverless Vehicle Ran Out of Control	0	-	0	-	0	-	0	-	0	-	1	0.6%
Leave Stop Sign Before Safe	0	-	0	-	2	1.0%	1	0.4%	2	1.1%	0	-
Taking Avoiding Action	1	0.7%	2	1.1%	5	2.4%	5	2.2%	4	2.3%	0	-
Driver Inexperience	5	3.4%	7	3.7%	14	6.8%	10	4.4%	16	9.2%	8	4.8%
Pedestrian Error/Confusion	0	-	0	-	0	-	0	-	2	1.1%	0	-
Human Condition - Apparently Normal	117	79.1%	158	84.0%	164	79.6%	183	80.3%	142	81.6%	131	78.9%
Defective Eyesight	0	-	0	-	0	-	1	0.4%	0	-	0	-
Defective Hearing	0	-	0	-	0	-	1	0.4%	0	-	0	-
Medical Disability	1	0.7%	0	-	0	-	0	-	0	-	1	0.6%

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Off-Road Vehicle Collisions

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Contributing Factor	2003 Total	% of 2003 Total	2004 Total	% of 2004 Total	2005 Total	% of 2005 Total	2006 Total	% of 2006 Total	2007 Total	% of 2007 Total	2008 Total	% of 2008 Total
Physical Disability	2	1.4%	0	-	0	-	1	0.4%	0	-	0	-
Mental Confusion/Unable to Remember	0	-	2	1.1%	1	0.5%	0	-	0	-	3	1.8%
Ability Impaired by Alcohol	8	5.4%	10	5.3%	8	3.9%	9	3.9%	8	4.6%	7	4.2%
Ability Impaired by Drugs	0	-	1	0.5%	0	-	1	0.4%	1	0.6%	1	0.6%
Had Been Drinking/Suspected Alcohol Use ¹	6	4.1%	6	3.2%	16	7.8%	9	3.9%	7	4.0%	4	2.4%
Distraction/Inattention	10	6.8%	4	2.1%	6	2.9%	11	4.8%	12	6.9%	12	7.2%
No apparent (vehicle) defect	n/a	-	n/a	-	191	92.7%	206	90.4%	77	44.3%	102	61.4%
Defective Brakes	n/a	-	n/a	-	3	1.5%	4	1.8%	1	0.6%	1	0.6%
Defective Steering	n/a	-	n/a	-	4	1.9%	3	1.3%	1	0.6%	0	-
Defective Headlights	n/a	-	n/a	-	1	0.5%	1	0.4%	8	4.6%	0	-
Defective Brake Lights	n/a	-	n/a	-	0	-	0	-	12	6.9%	0	-
Defective Lighting (Unspecified)	n/a	-	n/a	-	1	0.5%	1	0.4%	10	5.7%	0	-
Defective Engine Controls/Drive Train	n/a	-	n/a	-	0	-	0	-	6	3.4%	4	2.4%
Defective Suspension/Wheels	n/a	-	n/a	-	0	-	0	-	1	0.6%	1	0.6%
Defective Tow Hitch/Yoke	n/a	-	n/a	-	0	-	0	-	10	5.7%	0	-
Hood/Tailgate/Door/Covering Opened	n/a	-	n/a	-	0	-	0	-	1	0.6%	0	-
Defective Glazing (obscured window)	n/a	-	n/a	-	0	-	0	-	2	1.1%	0	-
Vehicle Modifications	n/a	-	n/a	-	0	-	0	-	3	1.7%	1	0.6%
Fire	n/a	-	n/a	-	0	-	0	-	0	-	3	1.8%
Animal Action – Wild	n/a	-	n/a	-	3	1.5%	147	64.5%	77	44.3%	2	1.2%
Animal Action – Domestic	n/a	-	n/a	-	3	1.5%	0	-	1	0.6%	0	-
Slippery Road Surface	n/a	-	n/a	-	8	3.9%	0	-	1	0.6%	7	4.2%
Snow Drift	n/a	-	n/a	-	14	6.8%	0	-	8	4.6%	12	7.2%
Obstruction/Debris on Roadway	n/a	-	n/a	-	8	3.9%	0	-	12	6.9%	16	9.6%

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Section 11

Off-Road Vehicle Collisions

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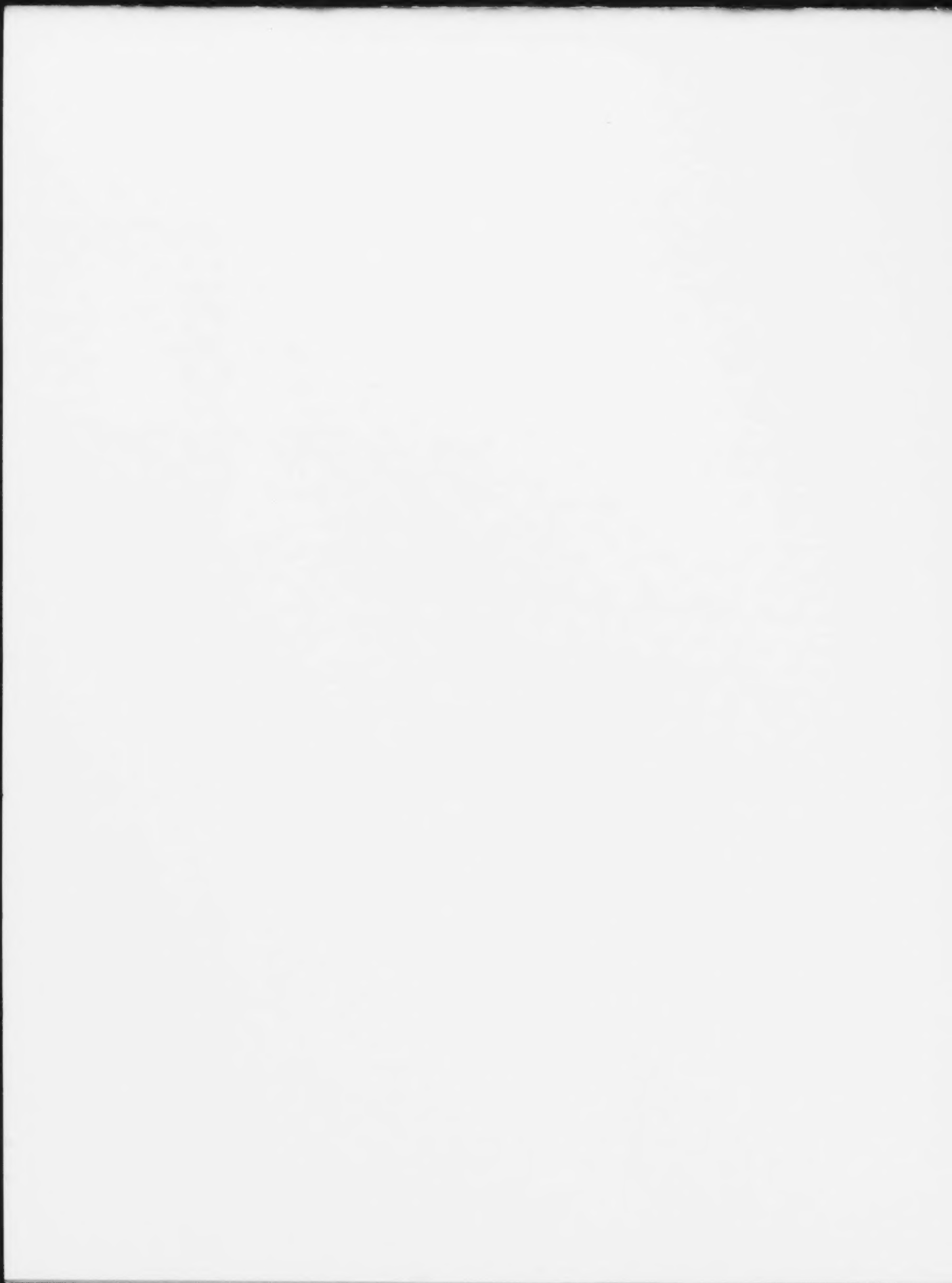
Contributing Factor	2003 Total	% of 2003 Total	2004 Total	% of 2004 Total	2005 Total	% of 2005 Total	2006 Total	% of 2006 Total	2007 Total	% of 2007 Total	2008 Total	% of 2008 Total
View Obstructed/Limited	n/a	-	n/a	-	9	4.4%	1	0.4%	10	5.7%	0	-
Glare/reflection	n/a	-	n/a	-	2	1.0%	8	3.5%	6	3.4%	1	0.6%
Construction Zone	n/a	-	n/a	-	0	-	1	0.4%	1	0.6%	0	-
Defective Driving Surface	n/a	-	n/a	-	17	8.3%	0	-	0	-	5	3.0%
Shoulders Defective	n/a	-	n/a	-	1	0.5%	14	6.1%	10	5.7%	0	-
Lane Markings Inadequate	n/a	-	n/a	-	1	0.5%	2	0.9%	0	-	0	-
Defective/Inoperative Traffic Control Device	n/a	-	n/a	-	0	-	0	-	1	0.6%	0	-
Weather	n/a	-	n/a	-	1	0.5%	1	0.4%	2	1.1%	2	1.2%
Pedestrian Corridor in Use	n/a	-	n/a	-	0	-	1	0.4%	3	1.7%	0	-
Presence of Prior Accident	n/a	-	n/a	-	1	0.5%	0	-	0	-	1	0.6%
Total	148	-	188	-	206	-	228	-	174	-	166	-

NOTE: 'Vehicle defects' and 'Environmental conditions' were not tracked as contributing factors to ORV collisions prior to 2005.

NOTE: For each vehicle and/or driver involved in a collision, police can record up to three contributing factors. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

SECTION 12 - Alcohol-Related Criminal Code Convictions





Introduction

This section counts the number of drivers convicted of alcohol-related Criminal Code offences for the year 2007 by age at the time of the offence and includes historical statistics for the period 1989 to 2006. Details are provided for 'first', 'second' and 'third and subsequent' (i.e., third, fourth, fifth, etc. combined) offences, whether or not the offence involved a collision and whether or not a youth was present in the vehicle at the time of the offence.

Key Highlights

In 2007, there are a total of 2,019 alcohol-related Criminal Code offence convictions among Manitoba drivers, including:

- 1,304 convictions for driving with a BAC over .08;
- 635 convictions for impaired driving; and,
- 80 convictions for refusing to provide a breath or blood sample.

In the 19-year period from 1989 to 2007, total alcohol-related Criminal Code convictions declined by 59.5%, from 4,984 in 1989 to 2,019 in 2007.

Alcohol-related Criminal Code convictions have declined in all age groups in Manitoba. Comparing the total number of convictions in 2007 to 1989 among drivers:

- Under 25 years of age, convictions declined by 62.7%;
- 25 to 44 years of age, convictions declined by 62.3%;
- 45 to 65 years of age, convictions declined by 39.8%; and,
- 65 years of age and older, convictions declined by 46.5%.

Licensed drivers up to the age of 44 are overrepresented in alcohol-related Criminal Code convictions.

Rates of recidivism, indicated by second, third and subsequent offences by the same driver, decreased substantially from 1997 to 2007. There was a 59.9% reduction in drivers convicted of a second alcohol-related Criminal Code offence, and a 70.6% reduction in drivers convicted of a third and subsequent offence in 2007 when compared to 1997.

Major Elements Examined

This section reports the number of drivers convicted of alcohol-related Criminal Code offences. There is a one-year lag in the statistics reported to allow for court processing time. Therefore, 2007 is the most current year for which these statistics are available.

Convictions reported for 2007 have been broken down by whether or not a passenger under the age of 16 was in the vehicle at the time the offence occurred (under columns designated by a trailing "C" in the statute number). In 2005, Manitoba added increased consequences to Criminal Code offences 253A, 253B and 254-5 committed with a youth in the vehicle; 2007 represents the first year where these conviction categories are available for reporting.

Beginning in 2007, convictions for impaired driving offences originating in other provinces and the United States have been added to the counts reported here. Prior to that time, these "out-of-province" offences were not included in the annual counts.

"Relative involvement rates" in this section of the report are calculated as a rate per 1,000 licensed drivers to ensure consistency with other jurisdictions.

Terms and Definitions

"Blood alcohol content (BAC)"

- A measure of the concentration of alcohol in a person's blood. A measure of ".08 BAC" is equivalent of 80 milligrams of alcohol per 1,000 milligrams of blood, or 0.08%.

"Criminal Code 253A" and "Criminal Code 253B"²: Impaired driving

- Everyone commits an offence who operates a motor vehicle or vessel or operates or assists in the operation of an aircraft or of railway equipment or has the care or control of a motor vehicle, vessel, aircraft or railway equipment, whether it is in motion or not,
 - (a) while the person's ability to operate the vehicle, vessel, aircraft or railway equipment is impaired by alcohol or a drug; or
 - (b) having consumed alcohol in such a quantity that the concentration in the person's blood exceeds eighty milligrams of alcohol in one hundred millilitres of blood.
- For greater certainty, the reference to impairment by alcohol or a drug in paragraph (a) includes impairment by a combination of alcohol and a drug.
- "253AC" and "253BC" indicate a conviction when there was a youth in the vehicle.

"Criminal Code Statute 254-5": Refusing to comply with a request for sample

- If a peace officer has reasonable grounds to suspect that a person has alcohol or a drug in their body and that the person has, within the preceding three hours, operated a motor vehicle or vessel, operated or assisted in the operation of an aircraft or railway equipment or had the care or control of a motor vehicle, a vessel, an aircraft or railway equipment, whether it was in motion or not, the peace officer may, by demand, require the person to comply with paragraph (a), in the case of a drug, or with either or both of paragraphs (a) and (b), in the case of alcohol:
 - (a) to perform forthwith physical coordination tests ... and, if necessary, to accompany the peace officer for that purpose; and
 - (b) to provide forthwith a sample of breath that, in the peace officer's opinion, will enable a proper analysis to be made by means of an approved screening device and, if necessary, to accompany the peace officer for that purpose.
- Everyone commits an offence who, without reasonable excuse, fails or refuses to comply with a demand made under this section.
- "254-5C" indicates a conviction when there was a youth in the vehicle.

"Criminal Code Statute 255-2": Impaired driving/refusing to provide sample causing injury

- Everyone who commits an offence under paragraph 253(a) and causes bodily harm to another person as a result is guilty of an indictable offence and liable to imprisonment for a term of not more than 10 years.
- Everyone who, while committing an offence under paragraph 253(b), causes an accident resulting in bodily harm to another person is guilty of an indictable offence and liable to imprisonment for a term of not more than 10 years.
- Everyone who commits an offence under subsection 254(5) and, at the time of committing the offence, knows or ought to know that their operation of the motor vehicle, vessel, aircraft or railway equipment, their assistance in the operation of the aircraft or railway equipment or their care or control of the motor vehicle, vessel, aircraft or railway equipment caused an accident resulting in bodily harm to another person is guilty of an indictable offence and liable to imprisonment for a term of not more than 10 years.

"Criminal Code Statute 255-3": Impaired driving/refusing to provide sample causing death

- Everyone who commits an offence under paragraph 253(a) and causes the death of another person as a result is guilty of an indictable offence and liable to imprisonment for life.
- Everyone who, while committing an offence under paragraph 253(b), causes an accident resulting in the death of another person is guilty of an indictable offence and liable to imprisonment for life.
- Everyone who commits an offence under subsection 254(5) and, at the time of committing the offence, knows or ought to know that their operation of the motor vehicle, vessel, aircraft or railway equipment, their assistance in the operation of the aircraft or railway equipment or their care or control of the motor vehicle, vessel, aircraft or railway equipment caused an accident resulting in the death of another person, or in bodily harm to another person whose death ensues, is guilty of an indictable offence and liable to imprisonment for life.

² Definitions for Criminal Code Statute 253, 254 and 255 are taken directly from the **Criminal Code (R.S., 1985, c. C-46)** of Canada, as posted on the Department of Justice website. (<http://laws.justice.gc.ca/en/>)

Table 12-1: Total Alcohol-Related Criminal Code Convictions by No Accident/With Accident Involvement

Table 12-1

Total Alcohol-Related Criminal Code Convictions by No Accident/With Accident Involvement: 1989 to 2007*

Year	Alcohol Content Over .08		Alcohol Content Over .08 with youth in the vehicle		Impaired Driving		Impaired Driving with youth in the vehicle		Impaired Driving		Refuse Sample		Refuse Sample with youth in the vehicle		Total
	253B		253BC		253A		253AC		255-2	255-3	254-5		254-5C		
	No Accident	With Accident	No Accident	With Accident	No Accident	With Accident	No Accident	With Accident	Injury	Death	No Accident	With Accident	No Accident	With Accident	
1989	3,392	494	N/A	N/A	370	110	N/A	N/A	33	6	484	95	N/A	N/A	4,984
1990	3,276	421	N/A	N/A	332	73	N/A	N/A	28	2	411	73	N/A	N/A	4,616
1991	3,339	373	N/A	N/A	321	52	N/A	N/A	44	2	398	62	N/A	N/A	4,591
1992	2,683	335	N/A	N/A	269	55	N/A	N/A	41	3	321	45	N/A	N/A	3,752
1993	2,210	308	N/A	N/A	282	52	N/A	N/A	29	3	274	59	N/A	N/A	3,217
1994	2,208	308	N/A	N/A	344	61	N/A	N/A	34	2	292	70	N/A	N/A	3,319
1995	2,298	180	N/A	N/A	366	39	N/A	N/A	25	3	227	37	N/A	N/A	3,175
1996	2,133	134	N/A	N/A	303	31	N/A	N/A	24	0	227	23	N/A	N/A	2,875
1997	2,378	141	N/A	N/A	338	28	N/A	N/A	37	3	250	27	N/A	N/A	3,202
1998	2,413	74	N/A	N/A	377	27	N/A	N/A	36	1	274	17	N/A	N/A	3,219
1999	2,400	60	N/A	N/A	423	18	N/A	N/A	29	3	309	11	N/A	N/A	3,253
2000	1,945	14	N/A	N/A	488	5	N/A	N/A	34	4	241	4	N/A	N/A	2,735
2001	1,780	3	N/A	N/A	568	6	N/A	N/A	35	2	185	1	N/A	N/A	2,580
2002	1,649	6	N/A	N/A	607	4	N/A	N/A	20	4	143	0	N/A	N/A	2,433
2003	1,463	1	N/A	N/A	565	2	N/A	N/A	19	3	144	0	N/A	N/A	2,197
2004	1,316	0	N/A	N/A	486	0	N/A	N/A	19	4	97	0	N/A	N/A	1,922
2005	1,089	0	N/A	N/A	474	0	N/A	N/A	16	4	98	0	N/A	N/A	1,681
2006	1,270	0	N/A	N/A	478	0	N/A	N/A	12	4	67	0	N/A	N/A	1,843
2007	1,301	0	3	0	618	0	1	0	14	2	80	0	0	0	2,019
% Change 1989-07	-61.6%	-100.0%	N/A	N/A	67.0%	-100.0%	N/A	N/A	-57.6%	-66.7%	-83.5%	-100.0%	N/A	N/A	-59.5%

*There is a one-year lag in the statistics reported to allow for court processing time. Therefore, 2007 is the most current year for which these statistics are available.

During the nineteen-year period 1989 to 2007, the total number of drivers convicted of an alcohol-related Criminal Code offence declined each year between 1989 and 1993. A small increase in the total number of convictions in 1994 was followed by decreases in 1995 and 1996 and by increases in 1997, 1998 and 1999. Decreases were then recorded each year until 2006, when convictions increased by 9.6% over 2005.

In 2007, drivers convicted of alcohol-related Criminal Code offences (2,019) increased by 9.5% compared to 2006 (1,843). The average rate of change in the total count of alcohol-related Criminal Code convictions in the previous five year period (2002 to 2006) was a decrease of 6.2% per year.

CAUTION: Beginning in 2007, convictions for impaired driving offences originating in other provinces and the United States have been added to the counts reported here. Prior to that time, these "out-of-province" offences were not included in the annual counts. The increase in convictions noted in 2007 compared to previous years is affected by this change. Without it, the percentage change in 2007 compared to 2006 would have been a 1.5% increase.

In the 19-year period from 1989 to 2007, total alcohol-related Criminal Code convictions declined by 59.5%, from 4,984 in 1989 to 2,019 in 2007.

- Convictions for "alcohol content over .08" where there was no accident decreased by 61.6% (3,392 in 1989 to 1,301 in 2007).
- Convictions for "refuse sample" where there was no accident decreased by 83.5% (484 in 1989 to 80 in 2007).

There were 3 convictions for driving with a "BAC over .08" and one for "impaired driving" with a youth in the vehicle in 2007. No convictions for "refusing to provide a breath sample" with a youth in the vehicle were recorded in 2007. Because this is the first year in which it was possible to be charged with these offences, there is not historical data available for the years 1989 to 2006.

NOTE: Counts and percentage change statistics that cannot be calculated due to fact that the specific conviction code or type did not exist in historical data are noted in the table as "N/A".

Section 12

Alcohol-Related Criminal Code Convictions

Table 12-2: Total Alcohol-Related Criminal Code Convictions by Age Group

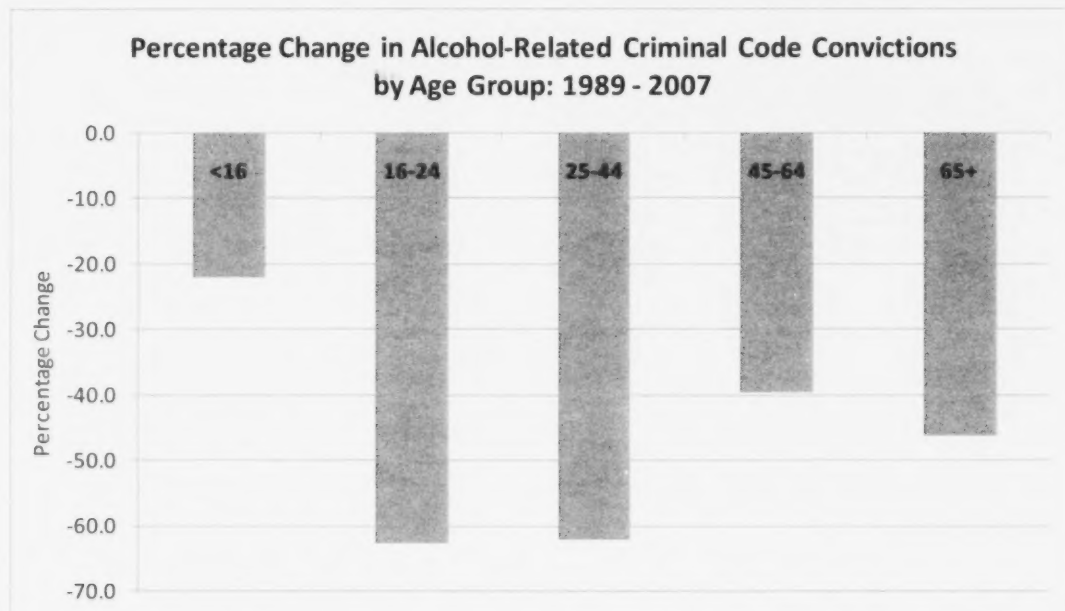
Table 12-2
Total Alcohol-Related Criminal Code Convictions by Age Group: 1989 to 2007

	<16	16-17	18-20	21-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	Total
1989	9	124	622	909	983	755	516	392	242	163	133	65	46	19	6	4,984
1990	10	119	583	744	940	704	538	341	223	179	92	73	46	19	5	4,616
1991	12	104	520	709	923	728	527	389	240	176	110	71	47	26	9	4,591
1992	4	86	426	606	667	624	431	365	206	129	83	62	42	13	8	3,752
1993	7	64	286	494	584	543	402	292	194	146	79	67	31	22	6	3,217
1994	5	49	363	473	553	566	435	288	205	138	88	86	42	24	4	3,319
1995	3	82	364	471	518	547	422	278	177	111	86	59	33	11	13	3,175
1996	7	66	366	388	447	394	387	267	208	151	71	66	32	10	15	2,875
1997	7	105	430	495	451	440	440	302	201	130	78	50	44	18	11	3,202
1998	7	109	349	448	495	459	455	306	227	163	82	49	39	25	6	3,219
1999	13	81	412	504	484	445	429	330	248	151	56	46	28	15	11	3,253
2000	12	75	345	430	396	368	354	298	198	102	66	42	23	14	12	2,735
2001	11	91	357	379	384	334	322	259	177	128	54	44	22	15	3	2,580
2002	11	85	333	338	359	309	277	282	175	102	78	39	24	10	11	2,433
2003	7	65	300	308	317	269	237	233	178	109	81	44	26	14	9	2,197
2004	5	55	282	273	251	235	209	232	150	83	63	46	21	13	4	1,922
2005	6	46	210	272	243	204	178	158	139	91	51	45	24	5	9	1,681
2006	8	58	260	298	267	222	174	182	170	82	60	35	16	5	5	1,843
2007	7	50	274	289	306	248	244	200	151	110	67	35	19	9	10	2,019
% Change 1989-07	-22.2%	-59.7%	-55.9%	-68.2%	-68.9%	-67.2%	-52.7%	-49.0%	-37.6%	-32.5%	-49.6%	-46.2%	-58.7%	-52.6%	66.7%	-59.5%

During the nineteen-year period 1989 to 2007, all age groups recorded declines in alcohol-related Criminal Code convictions. The largest decreases are among drivers aged 21 to 24, 25 to 29 and 30 to 34, which amounted to 68.2%, 68.9% and 67.2%, respectively.

In contrast, the under 16 age group recorded the smallest decrease in alcohol-related Criminal Code convictions, 22.2% (though was a small base; the total count of convictions decreased from 9 to 7), followed by 50 to 54 year olds at a 32.5% decrease, and finally the 45 to 49 year old group at a 37.6% decrease.

Figure 12-1: Percentage Change in Alcohol-Related Criminal Code Convictions by Age Group

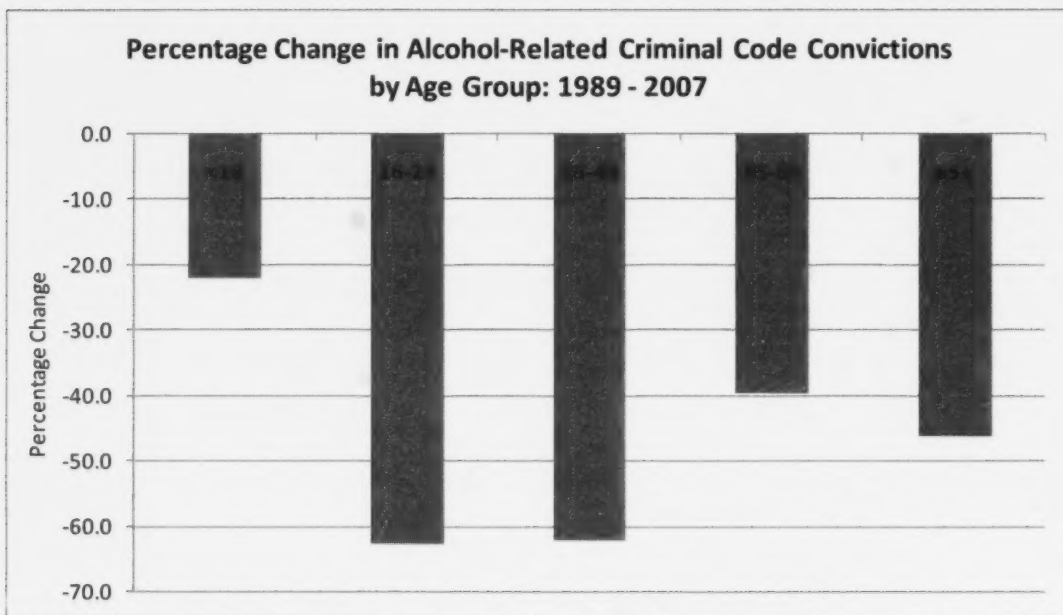


Overall decreases in the number of convictions (comparing 2007 to 1989) are highest among younger drivers. Drivers aged 16 to 24 and those aged 25 to 44 had similar large percentage decreases (63.0% and 62.3%, respectively) while those aged 45 and older had much smaller overall decreases in total number of convictions (39.8% among 45 to 64 year olds and 46.5% among those aged 65 and older).

During the nineteen-year period 1989 to 2007, all age groups recorded declines in alcohol-related Criminal Code convictions. The largest decreases are among drivers aged 21 to 24, 25 to 29 and 30 to 34, which amounted to 68.2%, 68.9% and 67.2%, respectively.

In contrast, the under 16 age group recorded the smallest decrease in alcohol-related Criminal Code convictions, 22.2% (though was a small base; the total count of convictions decreased from 9 to 7), followed by 50 to 54 year olds at a 32.5% decrease, and finally the 45 to 49 year old group at a 37.6% decrease.

Figure 12-1: Percentage Change in Alcohol-Related Criminal Code Convictions by Age Group



Overall decreases in the number of convictions (comparing 2007 to 1989) are highest among younger drivers. Drivers aged 16 to 24 and those aged 25 to 44 had similar large percentage decreases (63.0% and 62.3%, respectively) while those aged 45 and older had much smaller overall decreases in total number of convictions (39.8% among 45 to 64 year olds and 46.5% among those aged 65 and older).

Section 12

Alcohol-Related Criminal Code Convictions

Table 12-3: Total Alcohol-Related Criminal Code Offences by Age Group and Conviction Type

Table 12-3
Total Alcohol-Related Criminal Code Offences by Age Group and Conviction Type: 2007

Age Group	Alcohol Content Over .08		Alcohol Content Over .08 with youth in the vehicle		Impaired Driving		Impaired Driving with youth in the vehicle		Impaired Driving		Refuse Sample		Refuse Sample with youth in the vehicle		Total
	253B		253BC		253A		253AC		255-2	255-3	254-5		254-5C		
	No Accident	With Accident	No Accident	With Accident	No Accident	With Accident	No Accident	With Accident	Injury	Death	No Accident	With Accident	No Accident	With Accident	
<16	4	0	0	0	3	0	0	0	0	0	0	0	0	0	7
16-17	30	0	0	0	19	0	0	0	0	0	1	0	0	0	50
18-20	202	0	0	0	64	0	0	0	4	1	3	0	0	0	274
21-24	198	0	1	0	82	0	0	0	0	0	8	0	0	0	289
25-29	200	0	0	0	88	0	0	0	3	1	14	0	0	0	306
30-34	152	0	0	0	80	0	1	0	0	0	15	0	0	0	248
35-39	155	0	1	0	78	0	0	0	1	0	9	0	0	0	244
40-44	104	0	0	0	78	0	0	0	2	0	16	0	0	0	200
45-49	89	0	0	0	55	0	0	0	0	0	7	0	0	0	151
50-54	70	0	1	0	31	0	0	0	2	0	6	0	0	0	110
55-59	45	0	0	0	20	0	0	0	1	0	1	0	0	0	67
60-64	26	0	0	0	9	0	0	0	0	0	0	0	0	0	35
65-69	14	0	0	0	4	0	0	0	1	0	0	0	0	0	19
70-74	8	0	0	0	1	0	0	0	0	0	0	0	0	0	9
75+	4	0	0	0	6	0	0	0	0	0	0	0	0	0	10
Total	1,301	0	3	0	618	0	1	0	14	2	80	0	0	0	2,019

Table 12-4: Alcohol-Related Criminal Code Convictions by Active Licensed Drivers and Age Group

Table 12-4

Alcohol-Related Criminal Code Convictions by Active Licensed Drivers and Age Group: 1997, 2002 and 2007

Age Group	1997			2002			2007		
	# Alcohol Convictions	% Total Alcohol Convictions	% Licensed Drivers	# Alcohol Convictions	% Total Alcohol Convictions	% Licensed Drivers	# Alcohol Convictions	% Total Alcohol Convictions	% Licensed Drivers
<16-24*	1,037	32.4%	14.5%	767	31.5%	14.4%	620	30.7%	14.1%
25-44	1,633	51.0%	41.8%	1,227	50.4%	37.6%	998	49.4%	34.4%
45-64	459	14.3%	29.1%	394	16.2%	32.8%	363	18.0%	36.0%
65+	73	2.3%	14.6%	45	1.8%	15.2%	38	1.9%	15.5%
Total	3,202	100%	100%	2,433	100%	100%	2,019	100%	100%

* Includes statistics for individuals under the age of 16 convicted of an alcohol-related Criminal Code offence, but who may not have been licenced at the time of offence.

Overall, drivers convicted of alcohol-related convictions decreased by 37%, from 3,202 in 1997 to 2,019 in 2007.

<16 to 24 Age Group

Licensed drivers up to the age of 24 are overrepresented in alcohol-related Criminal Code convictions. Although accounting for 14.5% of all licensed drivers in 1997, they accounted for 32.4% of alcohol offence convictions. In 2007, these drivers represented 14.1% of the licensed drivers, but accounted for 30.7% of convictions.

25 to 44 Age Group

Drivers between the ages of 25 to 44 account for the highest proportion of alcohol-related Criminal Code convictions. In the years 1997, 2002 and 2007, drivers in this group made up 41.8%, 37.6% and 34.4% of licensed drivers, respectively. However, these drivers accounted for 51.0%, 50.4% and 49.4% of Criminal Code convictions in the years 1997, 2002 and 2007, respectively.

45 to 64 Age Group

Drivers aged 45 to 64 are underrepresented in alcohol-related Criminal Code convictions. In the years 1997, 2002 and 2007, drivers in this group made up 29.1%, 32.8% and 36.0%, respectively, of licensed drivers. However, these drivers accounted for only 14.3%, 16.2% and 18.0%, respectively, of alcohol-related Criminal Code convictions in the same years.

65 and Older Age Group

Older drivers are underrepresented in alcohol-related Criminal Code convictions. Drivers 65 years of age and older made up 14.6%, 15.2% and 15.5% of licensed drivers, but accounted for only 2.3%, 1.8% and 1.9% of alcohol-related Criminal Code convictions in the years 1997, 2002 and 2007, respectively.

Table 12-5: Driver Involvement in 'First', 'Second' and 'Third and Subsequent' Alcohol-Related Criminal Code Convictions by Age Group

Table 12-5

Driver Involvement in 'First', 'Second' and 'Third and Subsequent' Alcohol-Related Criminal Code Convictions by Age Group: 1997, 2002 and 2007

Age Group	1997			2002			2007		
	Alcohol* Convictions	Licensed Drivers	Rate /1,000	Alcohol Convictions	Licensed Drivers	Rate /1,000	Alcohol Convictions	Licensed Drivers	Rate /1,000
Total Alcohol-Related Criminal Code Convictions									
<16-24	1,037	99,793	10.4	767	103,114	7.4	620	108,624	5.7
25-44	1,633	287,287	5.7	1,227	269,357	4.6	998	263,921	3.8
45-64	459	200,371	2.3	394	234,580	1.7	363	275,891	1.3
65+	73	99,778	0.7	45	108,742	0.4	38	118,935	0.3
Total	3,202	687,229	4.7	2,433	715,793	3.4	2,019	767,371	2.6
First Occurrence									
<16-24	919	99,793	9.2	683	103,114	6.6	585	108,624	5.4
25-44	1,364	287,287	4.7	1,026	269,357	3.8	890	263,921	3.4
45-64	384	200,371	1.9	342	234,580	1.5	333	275,891	1.2
65+	64	99,778	0.6	40	108,742	0.4	33	118,935	0.3
Total	2,731	687,229	4.0	2,091	715,793	2.9	1,841	767,371	2.4
Second Occurrence									
<16-24	104	99,793	1.0	73	103,114	0.7	33	108,624	0.3
25-44	202	287,287	0.7	151	269,357	0.6	89	263,921	0.3
45-64	56	200,371	0.3	40	234,580	0.2	21	275,891	0.1
65+	7	99,778	0.1	3	108,742	<0.1	5	118,935	<0.1
Total	369	687,229	0.5	267	715,793	0.4	148	767,371	0.2
Third and Subsequent Occurrence									
<16-24	14	99,793	0.1	11	103,114	0.1	2	108,624	<0.1
25-44	67	287,287	0.2	50	269,357	0.2	18	263,921	0.1
45-64	19	200,371	0.1	12	234,580	0.1	10	275,891	<0.1
65+	2	99,778	<0.1	2	108,742	0.0	0	118,935	-
Total	102	687,229	0.1	75	715,793	0.1	30	767,371	<0.1

* For comparative purposes, the report assumes each alcohol-related Criminal Code conviction is for a single licensed driver although a single driver may obtain more than one alcohol-related Criminal Code conviction in any given year or specific incident.

Compared to ten years ago, the relative involvement rate of drivers in alcohol-related Criminal Code convictions has declined by 44% (4.7 per 1,000 licensed drivers in 1997; 2.6 per 1,000 licensed drivers in 2007).

<16 to 24 Age Group

For every 1,000 licensed drivers in this age group, there were 10.4, 7.4 and 5.7 alcohol-related Criminal Code offences in 1997, 2002 and 2007, respectively. The 2007 rate for this age group is 45% below the 1997 rate.

25 to 44 Age Group

The relative involvement rate of drivers aged 25 to 44 in alcohol-related Criminal Code convictions (per 1,000 licensed drivers) was 5.7 in 1997, 4.6 in 2002, and 3.5 in 2007. The 2007 rate for this age group is 33% below the 1997 rate.

45 to 64 Age Group

The relative involvement rate of drivers aged 45 to 64 in alcohol-related Criminal Code convictions (per 1,000 licensed drivers) was 2.3 in 1997, 1.7 in 2002, and 1.3 in 2007. The 2007 rate for this age group is 43% below the 1997 rate.

65 and Older Age Group

The relative involvement rate of drivers aged 65 and older in alcohol-related Criminal Code convictions (per 1,000 licensed drivers) was 0.7 in 1997, 0.4 in 2002, and 0.3 in 2007. The 2007 rate for this age group is 56% below the 1997 rate.

First Occurrence

In 2007, the number of drivers convicted of an alcohol-related Criminal Code offence for the **first** time has decreased by 33% compared to ten years ago (2,731 in 1997; 1,841 in 2007).

Comparing the involvement rates for 1997 and 2007, first occurrence Criminal Code convictions for all age groups decreased.

- Age 24 and under – a 42% decrease in 2007 compared to 1997
- Age 25 to 44 – a 29% decrease in 2007 compared to 1997
- Age 45 to 64 – a 37% decrease in 2007 compared to 1997
- Age 65 and older – a 57% decrease in 2007 compared to 1997

Second Occurrence

In 2007, the number of drivers convicted of an alcohol-related Criminal Code offence for the **second** time has decreased by 60% compared to ten years ago (369 in 1997; 148 in 2007).

Comparing the involvement rates for 1997 and 2007, second occurrence Criminal Code convictions for all age groups decreased.

- Age 24 and under – a 71% decrease in 2007 compared to 1997
- Age 25 to 44 – a 52% decrease in 2007 compared to 1997
- Age 45 to 64 – a 73% decrease in 2007 compared to 1997
- Age 65 and older – a 40% decrease in 2007 compared to 1997

Third and Subsequent Occurrence

In 2007, the number of drivers convicted of an alcohol-related Criminal Code offence for the **third and subsequent** time has decreased by 71% compared to ten years ago (102 in 1997; 30 in 2007).

Comparing the involvement rates for 1997 and 2007, third and subsequent occurrence Criminal Code convictions for all age groups decreased.

- Age 24 and under – a 87% decrease in 2007 compared to 1997
- Age 25 to 44 – a 71% decrease in 2007 compared to 1997
- Age 45 to 64 – a 62% decrease in 2007 compared to 1997
- Age 65 and older – there were no third and subsequent offence convictions in this group in 2007.

CAUTION: Please interpret numbers of convictions for 'second' and 'third and subsequent' offences with care. Due to the small numbers of these convictions overall, small shifts in the counts can produce relatively large percentage change differences.

Glossary – Terms & Definitions

Terms and Definitions

"Accident Configuration"

- Briefly describes the action taken by a vehicle immediately prior to or at the start of the collision, including such events as rear-ending another vehicle, side-swiping another vehicle, turning into (the path of) another vehicle, parking, meeting another vehicle at an intersection and/or leaving the roadway.
- "Other" in terms of accident configuration includes, primarily, collisions involving more than one configuration or sequence of events.

"Active Drivers"

- Drivers holding an active Manitoba Driver's Licence of any specific Licence Class

"At-fault Contributing Factor"

- A contributing factor where some action or condition other than "driving properly" and "apparently normal" has been noted.

"ATV"

- All Terrain Vehicle; includes vehicles with 3, 4 and 6 wheels.

"Blood alcohol content (BAC)"

- A measure of the concentration of alcohol in a person's blood. A measure of ".08 BAC" is equivalent of 80 milligrams of alcohol per 1,000 milligrams of blood, or 0.08%.

"Casualty Involvement Rate"

- A calculation of the number of victims or casualties involved in traffic collisions for every 100,000 people in the general population in Manitoba. Population statistics are taken from the Provincial government and can be found at the following web address:
<http://www.gov.mb.ca/health/annstats/index.html>

"Casualty Type"

- A classification of the severity of the injury sustained by a victim in a traffic collision, i.e., whether someone was killed or injured. This classification also includes a designation for the severity of each non-fatal injury sustained (i.e., victims sustaining a serious/major, minor or minimal injury).

"Collision Severity"

- A classification of a collision based on the most severe result of the collision, i.e., whether someone was killed (fatal), injured (injury) or property damage only (PDO) occurred.

"Collision Type"

- Refers to the object struck by a motor vehicle during a collision (including: a pedestrian, another motor vehicle, a train, a motorcycle, a bicycle, an animal, and fixed objects) or to what happened to the vehicle in a single-vehicle collision (including: overturned on roadway and ran off roadway).

"Contributing Factor"

- Those circumstances or factors that the reporting police officer recorded as having contributed to the collision or its severity. Factors can be selected from four categories: driver action, human condition, vehicle condition, or environmental condition. The TAR allows for up to three contributing factors to be recorded for each driver or vehicle involved in the collision.

"Criminal Code 253A" and "Criminal Code 253B"³: Impaired driving

- Everyone commits an offence who operates a motor vehicle or vessel or operates or assists in the operation of an aircraft or of railway equipment or has the care or control of a motor vehicle, vessel, aircraft or railway equipment, whether it is in motion or not,
 - (a) while the person's ability to operate the vehicle, vessel, aircraft or railway equipment is impaired by alcohol or a drug; or
 - (b) having consumed alcohol in such a quantity that the concentration in the person's blood exceeds eighty milligrams of alcohol in one hundred millilitres of blood.
- For greater certainty, the reference to impairment by alcohol or a drug in paragraph (a) includes impairment by a combination of alcohol and a drug.
- "253AC" and "253BC" indicate a conviction when there was a youth in the vehicle.

"Criminal Code Statute 254-5": Refusing to comply with a request for sample

- If a peace officer has reasonable grounds to suspect that a person has alcohol or a drug in their body and that the person has, within the preceding three hours, operated a motor vehicle or vessel, operated or assisted in the operation of an aircraft or railway equipment or had the care or control of a motor vehicle, a vessel, an aircraft or railway equipment, whether it was in motion or not, the peace officer may, by demand, require the person to comply with paragraph (a), in the case of a drug, or with either or both of paragraphs (a) and (b), in the case of alcohol:
 - (a) to perform forthwith physical coordination tests ... and, if necessary, to accompany the peace officer for that purpose; and
 - (b) to provide forthwith a sample of breath that, in the peace officer's opinion, will enable a proper analysis to be made by means of an approved screening device and, if necessary, to accompany the peace officer for that purpose.
- Everyone commits an offence who, without reasonable excuse, fails or refuses to comply with a demand made under this section.
- "254-5C" indicates a conviction when there was a youth in the vehicle.

"Criminal Code Statute 255-2": Impaired driving/refusing to provide sample causing injury

- Everyone who commits an offence under paragraph 253(a) and causes bodily harm to another person as a result is guilty of an indictable offence and liable to imprisonment for a term of not more than 10 years.
- Everyone who, while committing an offence under paragraph 253(b), causes an accident resulting in bodily harm to another person is guilty of an indictable offence and liable to imprisonment for a term of not more than 10 years.
- Everyone who commits an offence under subsection 254(5) and, at the time of committing the offence, knows or ought to know that their operation of the motor vehicle, vessel, aircraft or railway equipment, their assistance in the operation of the aircraft or railway equipment or their care or control of the motor vehicle, vessel, aircraft or railway equipment caused an accident resulting in bodily harm to another person is guilty of an indictable offence and liable to imprisonment for a term of not more than 10 years.

³ Definitions for Criminal Code Statute 253, 254 and 255 are taken directly from the **Criminal Code (R.S., 1985, c. C-46)** of Canada, as posted on the Department of Justice website. (<http://laws.justice.gc.ca/en/>)

"Criminal Code Statute 255-3": Impaired driving/refusing to provide sample causing death

- Everyone who commits an offence under paragraph 253(a) and causes the death of another person as a result is guilty of an indictable offence and liable to imprisonment for life.
- Everyone who, while committing an offence under paragraph 253(b), causes an accident resulting in the death of another person is guilty of an indictable offence and liable to imprisonment for life.
- Everyone who commits an offence under subsection 254(5) and, at the time of committing the offence, knows or ought to know that their operation of the motor vehicle, vessel, aircraft or railway equipment, their assistance in the operation of the aircraft or railway equipment or their care or control of the motor vehicle, vessel, aircraft or railway equipment caused an accident resulting in the death of another person, or in bodily harm to another person whose death ensues, is guilty of an indictable offence and liable to imprisonment for life.

"Driver Action"

- A category of contributing factors attributed to actions taken or performed by a driver immediately prior to a collision.

"Driver Involvement Rate"

- A calculation of the number of drivers involved in traffic collisions for every 10,000 drivers licensed to drive in Manitoba. The total number of drivers licensed to drive includes both active and suspended drivers. This relative involvement rate does not take into account the number of vehicle kilometres driven by each driver group. More detail regarding the methodology used to count licensed drivers can be found in "*Section 2 Licensed Drivers*" of this report.

"Environmental Condition"

- A category of contributing factors attributed to environmental conditions (i.e., weather, road surface and animal actions) immediately prior to a collision.

"Fatal Collision"

- A motor vehicle collision in which at least one person is killed as a result of the collision. The death must have occurred within thirty days of the collision occurrence.

"Graduated Driver Licensing (GDL)"

- A three-stage program designed to help new drivers, regardless of age, acquire the knowledge and skill needed to safely operate a motor vehicle. Each licence stage has specific rules and restrictions governing when and under what circumstances the holder is allowed to operate a motor vehicle, enabling novice drivers to gain more experience under a greater variety of driving conditions. Both Class 5 and Class 6 licences have a GDL stage associated with them.
- Three stages of GDL: Learner (5/L or 6/L); Intermediate (5/I or 6/I); and, Full (5/F or 6/F).
- To view a full discussion of the GDL program in Manitoba, please visit:
 - http://www.mpi.mb.ca/PDFs/DVL_PDFs/GDLGuide.pdf; ou en Français,
 - http://www.mpi.mb.ca/PDFs/DVL_PDFs/GDLGUIDEfr.pdf

"Human Condition"

- A category of contributing factors attributed to the physical or mental condition of a driver immediately prior to a collision, most often that limit the driver's ability to drive safely or properly.

"Injured"

- The casualty type "injured" indicates the victim sustained some level of personal injury, but in which they were not killed. Levels of injury include: 'serious' or 'major' (admitted to hospital); 'minor' (treated and released from hospital); and, 'minimal' (no hospital treatment required). 'Other' injury is noted when the severity of the victim's injuries is not known or recorded in the TAR.

"Injury Collision"

- A motor vehicle collision in which at least one person has been recorded as sustaining some level of personal injury, but in which no one is fatally injured or killed. Levels of injury include: 'major' (admitted to hospital); 'minor' (treated and released from hospital); and, 'minimal' (no hospital treatment required).

"Killed"

- The casualty type "killed" indicates the victim involved in the traffic collision died as a result of their injuries within thirty days of the collision occurrence.

"Licence Class"

- A Manitoba Driver's Licence of a specific level which permits the holder to operate vehicles within a specific Vehicle Class

"Licensed Drivers"

- A count of all Manitobans aged 16 and older who hold a valid licence within the licensing year including active and suspended drivers. (See *Section 2 Licensed Drivers* for more information)

"Light Condition"

- Describes the light conditions at the scene of the accident, including:
 - Day – the light conditions which normally occur between one half hour after sunrise and one half hour before sunset;
 - Dawn – the light conditions which normally occur between one half hour before sunrise and one half hour after sunrise;
 - Dusk – the light conditions which normally occur between one half hour before sunset and one half hour after sunset;
 - Dark – the light conditions which normally occur between one half hour after sunset and one half hour before sunrise; and,
 - Artificial lighting – artificial illumination devices were functioning at the accident site under light conditions which normally occur between one half hour after sunset and one half hour before sunrise.

"Light Duty Vehicles"

- A classification of vehicle types including those defined in the Traffic Accident Report (TAR) as: passenger vehicles (automobile), mini/multi-purpose van, van under 4500 kg and pick-up under 4500 kg.

"NSC Commercial Vehicles"

- The National Safety Code (NSC) classification of vehicles is a classification of vehicle types including those defined in the Traffic Accident Report (TAR) as: "Truck greater than 4500 kilograms (unit chassis)", "Power Unit for Semi-Trailer", "Truck (Other)" (where the type and size of truck is unknown), "School Bus", "Transit Bus (Urban)", "Inter-City Bus", and "Bus (Other)". These vehicles bear a National Safety Code Number and are entered onto the National Safety Code Collision Monitoring Report.

"Off-road Vehicle (ORV)"

- One of several vehicle types designed for off-road use. It includes snowmobiles, off-road motorcycles, all-terrain vehicles (ATVs), amphibious vehicles, dune/sport buggies, and 4-wheel drive vehicles operated off-road.

"Pedestrian Action"

- Refers to the actions taken by a pedestrian immediately prior to a collision (including: crossing at an intersection with or without the right-of-way, crossing between intersections, running into the roadway, walking on the roadway, lying on the roadway, playing on the roadway, etc.).

"Pedestrian Involvement Rate"

- A calculation of the number of pedestrians involved in traffic collisions for every 100,000 people in the general population in Manitoba. Population statistics are taken from the Provincial government and can be found at the following web address:
<http://www.gov.mb.ca/health/annstats/index.html>

"Property Damage Only (PDO) Collision"

- A motor vehicle collision in which no injury or fatality is sustained and only property damage is the result.

"PSV Vehicles"

- Also known as 'public service vehicles', a classification of vehicle types including those defined in the Traffic Accident Report (TAR) as: "Other school vehicle", and "Emergency vehicles", including ambulance, fire and police vehicles.

"Region"

- Manitoba Infrastructure and Transportation is served by 5 regional office locations, each responsible for a geographic region (for boundaries, see Map 11-1). Regions are used in this section to indicate in which region a collision occurred.

"Relative Involvement"

- A calculation of the number of collisions per specific unit of licensed drivers or registered vehicles. For the purposes of this report, relative involvement is calculated per 10,000 licensed drivers or registered vehicles.

"Reportable Collision"

- Motor vehicle collisions resulting in a fatality, injury or property damage in excess of \$1,000 are required by law to be reported to a law enforcement agency. Subsequently, the law enforcement agency completes a Traffic Accident Report for the collision. This report deals with these reportable collisions and the Traffic Accident Reports arising from them.

"Road User Class"

- A classification based on how a person involved in a collision was using the road at the time of the collision. It includes: Drivers (of motor vehicles), Passengers (in motor vehicles), those Riding/Hanging On (to a motor vehicle), Motorcyclist (drivers and passengers), Moped (drivers and passengers), Bicyclist (drivers and passengers), and Pedestrians.

"Rural Location"

- Collisions occurring on primary highways, secondary highways and local roadways, including the Trans Canada Highway and excluding those that occur within the municipal boundaries of an urban area.

"Suspended drivers"

- Drivers holding a Manitoba Driver's Licence of any specific Licence Class who have been disqualified from driving for some reason. Although the list is extensive, some possible suspensions could be for driving violations, medical conditions, administrative suspensions and criminal code convictions.

"Urban Location"

- Collisions occurring within the municipal boundaries of urban areas, including Winnipeg, Brandon, Portage la Prairie, Flin Flon, Dauphin, Thompson, The Pas, Selkirk and others.

"Vehicle Class"

- Category of vehicles meeting specific designations and specifications
- Non-commercial vehicle classes are vehicles registered for private use and include:
 - Passenger - A motor vehicle classified by the manufacturer as a passenger car or which is designed, constructed or adapted for the principle purpose of transporting passengers and includes a delivery car, but does not include a motorcycle, moped or motor vehicle which is designed, constructed or adapted for the purpose of carrying goods or commodities.
 - Antique - A car, truck or motorcycle that is more than thirty years old at the time of application for registration. A motor vehicle registered as an antique car, truck or motorcycle can be driven only when: taking it to be repaired or serviced; displaying it to the public in a parade or procession and driving it to or from such a parade or procession; driving it to an antique car, truck or motorcycle rally as authorized by the Registrar of Motor Vehicles.
 - Motorcycle - A vehicle that has a steering handlebar completely constrained from rotating in relation to the axle of one wheel in contact with the ground, is designed to travel on not more than three wheels in contact with the ground, has a minimum unladen seat height of 650 millimetres, has a minimum wheel rim diameter of 250 millimetres, has a minimum wheelbase of 1,016 millimetres, and, has a maximum speed capability of more than 50 km/h but does not include a moped, power-assisted bicycle or tractor.
 - Moped - A motor vehicle which has 2 tandem wheels or 3 wheels, each of which is more than 250 millimetres in diameter, has a seat or saddle having a minimum unladen height of 650 millimetres, when measured from the ground level to the top of the forward most part of the saddle, is capable of being driven at all times by pedals only if so equipped, by motor only or by both pedals and motor, and, the motor has a piston displacement of not more than 50 cubic centimetres, or is an electric motor neither of which is capable of enabling the moped to attain a speed greater than 50 km/h.
 - Truck - see "Passenger".
 - Farm Truck - A motor vehicle classified as a "truck" at time of registration and is owned by a person engaged in farming.
 - Snow Vehicle - A vehicle that has a gross vehicle weight in exceeding 454 kilograms and is not equipped with wheels, but in place thereof is equipped with tractor treads alone or with tractor treads and skis, or with skis and a propeller, or is a toboggan equipped with tractor treads or a propeller, is designed primarily for operating over snow or ice, and is used primarily for that purpose, and is designed to be self-propelled.
 - Trailer - A vehicle designed for carrying persons or chattels, and for being towed by a motor vehicle, and includes a farm trailer but does not include an implement of husbandry that is temporarily towed, propelled, or moved upon a highway.
 - Tractor - A self-propelled vehicle that is designed primarily for traction purposes, and that is not itself constructed to carry a load other than the driver, and includes a farm tractor but does not include a truck tractor or a special mobile machine.
- Commercial vehicle classes are those involving vehicles registered to or for the use of a business and include:
 - Truck - A truck (or trailer) used to transport the registered owner's (or lessee's) own business goods: beyond a radius of 20 kilometres of the City of Winnipeg, where the registered owner's business address is in the City of Winnipeg, beyond a radius of 30 kilometres of a city, town or village other than the City of Winnipeg, where the registered owner's address is not in the City of Winnipeg.
 - Public Service Vehicles (PSV) - A motor vehicle or trailer operated by or on behalf of any person, for transportation for gain or compensation of persons or property upon a highway, and includes a semi-trailer truck; but does not include the passenger-carrying-motor vehicles of an electric, or steam railway or motor bus company operating on the streets of a city, or school buses, ambulances or hearses or motor vehicle operated for gain or compensation under *The Taxicab Act* or a municipal by-law in cities, towns, and villages.

- Dealer - A person who carries on the business as principal or agent, or who holds himself or herself out as carrying on the business as principal or agent, (a) of buying motor vehicles or trailers; (b) of selling motor vehicles or trailers, whether or not in combination with leasing them; or (c) of buying and selling motor vehicles or trailers, whether or not in combination with leasing them.
- Repairer - A person who maintains a garage for the purpose of rendering services therein upon motor vehicles and/or trailers, at a charge, price or consideration; or who owns and operates a fleet of five or more motor vehicles or trailers; or both, and maintains a facility for their repair, is permitted under The Highway Traffic Act to obtain "Repairer" licence plates to be used to transport motor vehicles for repair from place of origin to the repair facility and return, and the testing of the motor vehicle after the repair work has been completed.
- Taxi - A motor vehicle had, kept, used, intended for use, or operated, for the transportation of persons for compensation, and includes such vehicles when garaged or under repair; but does not include a public service vehicle, a trolley bus or passenger-carrying motor vehicle or a public transportation system operating on the streets of a city, a school bus, an ambulance, a hearse, or a motor vehicle, or vehicle of a class of motor vehicles, that The Taxicab Board established under The Taxicab Act excludes from the definition of a taxicab under that Act.
- Livery - A vehicle licenced under *The Highway Traffic Act* for the transportation of persons for compensation and is licensed to operate in the Province according to terms issued by the Motor Transport Board.
- Trailers - see previous definition.

"Vehicle Condition"

- A category of contributing factors attributed to the physical condition of a vehicle immediately prior to a collision.

"Vehicle Occupant"

- All those in the "Road User Class" of "Drivers" and "Passengers". It excludes "Motorcyclist", "Bicyclist", "Moped", those "Riding/Hanging On" to a vehicle and "Pedestrians".

"Vehicle Involvement Rate"

- A calculation of the number of vehicles involved in traffic collisions for every 10,000 vehicles registered in Manitoba. The total number of vehicles registered is based on a point-in-time observation of the number of vehicles registered in specific vehicle classes. More detail regarding the methodology used to count registered vehicles can be found in "Section 3 Vehicle Registrations" of this report.

"Weather Condition"

- Describes the weather conditions prevalent at the time of the accident, including:
 - Clear - bright conditions, without precipitation or airborne matter, are recorded as clear;
 - Cloudy - dull, overcast conditions, without precipitation or airborne matter, are recorded as cloudy;
 - Raining - raining (self explanatory);
 - Snowing - snowing (self explanatory);
 - Fog or Mist - airborne matter, of natural origin, which obscures visibility;
 - Smoke or Dust - airborne matter, of a natural or artificial origin, which obscures visibility;
 - Freezing Rain / Sleet / Hail - freezing rain, sleet or hail (self explanatory);
 - Drifting Snow - snow drifting on or above roadway, which obscures visibility of the roadway, road markings, traffic devices or roadway fixtures; and,
 - Strong Winds - used if wind was a contributing factor in the accident.





